

Planning Commission Date: April 11, 2007

Item No. 16

## MILPITAS PLANNING COMMISSION AGENDA REPORT

---

Category: Public Hearing

Report Prepared by: Momo Ishijima

Public Hearing: Yes:   X   No:       

Notices Mailed On: 3/30/07

Published On: 3/29/07

Posted On: 3/30/07

---

**TITLE:**

**ESTRELLA PROJECT - GENERAL PLAN AMENDMENT NO. GM2006-1, MIDTOWN SPECIFIC PLAN AMENDMENT, ZONE CHANGE NO. ZC2006-1, SITE PLAN AND ARCHITECTURAL APPROVAL NO. SZ2006-5, MAJOR TENTATIVE MAP NO. MA2006-2 AND ENVIRONMENTAL IMPACT ASSESSMENT NO. EA2006-4**

**Proposal:**

A request for a General Plan Amendment, Midtown Specific Plan Amendment, Rezoning, Site Plan and Architectural Review, Major Tentative Map and Environmental Impact Assessment to allow for the demolition of an existing industrial park and the construction of 368 podium and townhouse style residential condominium units, on-site surface and podium parking, recreational and open space facilities on 11.17 acres. The properties are proposed to be redesignated from Industrial Park to Multi-Family, Very High Density (31 to 40 dwelling units per acre) and rezoned from Industrial Park with "S" Zone Overlay District "MP-S" to Multi-Family, Very High Density with "S" Zone Overlay District "R4-S."

**Location:**

1601~1765 South Main Street

**APN:**

086 21 073

**RECOMMENDATION:**

**Close Public Hearing. Adopt Resolution Recommending Approval of General Plan Amendment No. GM2006-1, Midtown Specific Plan Amendment and Zone Change No. ZC2006-1 to City Council. Recommend Approval of Major Tentative Map No. MA2006-2 based on the Findings and Recommended Special Conditions below. Adopt a Resolution Recommending the Certification of the Supplemental Environmental Impact Report (Environmental Impact Assessment) No. EA2006-4 to City Council. Approve Site Plan and Architectural Approval No. SZ2006-5 based on the Findings and Recommended Special Conditions below.**

Applicant: Donna Vingo, Warmington Homes, 2010 Crow Canyon Place, Suite 450, San Ramon, CA 94583

Property Owner: SB Tech Center LLC, 17320 Red Hill Avenue, Irvine, CA 92614

Previous Action(s): “S” Zone Approval and Amendments, Conditional Use Permit

Environmental Info: A Supplemental Environmental Impact Report has been prepared and circulated for this project.

General Plan Designation: Industrial Park

Present Zoning: MP-S, Industrial Park with an “S” Zone Overlay

Existing Land Use: Industrial office building (South Bay Tech Center)

Agenda Sent To: Applicant and owner as noted above

Attachments: *Attachment A* – Resolution for Recommending Approval of General Plan Amendment and Midtown Specific Plan Amendment & Map Exhibits  
*Attachment B* – Resolution for Recommending Approval of Zoning Change & Map Exhibit  
*Attachment C* – Resolution for Recommending Certification of the Supplemental Environmental Impact Report  
*Attachment D* – Project Plans & Tentative Maps  
*Attachment E* – Applicant Project Description  
*Attachment F* – Draft Supplemental Environmental Impact Report  
*Attachment G* – Final Supplemental Environmental Impact Report  
*Attachment H* – Storm Water Control Plan (April 2, 2007)  
*Attachment I* – Tree Report (March, 2007)

PJ#: 3205

---

## BACKGROUND

On December 20, 1983, the City Council approved a General Plan Amendment and Rezoning of a 11+ acre vacant site from Single Family, Low Density (up to 5 dwelling units per acre) and Neighborhood Commercial to Industrial Park. Approximately six (6) acres of the site was redesignated and rezoned from Single Family, Low Density (up to 5 dwelling units per acre) to Industrial Park. Approximately five (5) acres of the site, fronting South Main Street, was redesignated and rezoned from Neighborhood Commercial to Industrial Park.

On March 7, 1985, the Planning Commission approved “S” Zone (Site and Architectural Review) Approval for the construction of two (2) two-story multi-tenant industrial office buildings, totaling 79,872 square feet in floor area. The industrial office complex was named “Capital Tech Center.” On November 7, 1989, the City Council approved “S” Zone Approval Amendment and Variance No. 460 for the construction of four (4) additional single-story multi-tenant industrial office buildings, totaling 81,780 square feet in floor area. Subsequent “S” Zone Approval Amendments include approvals for a sign program, building additions and Conditional

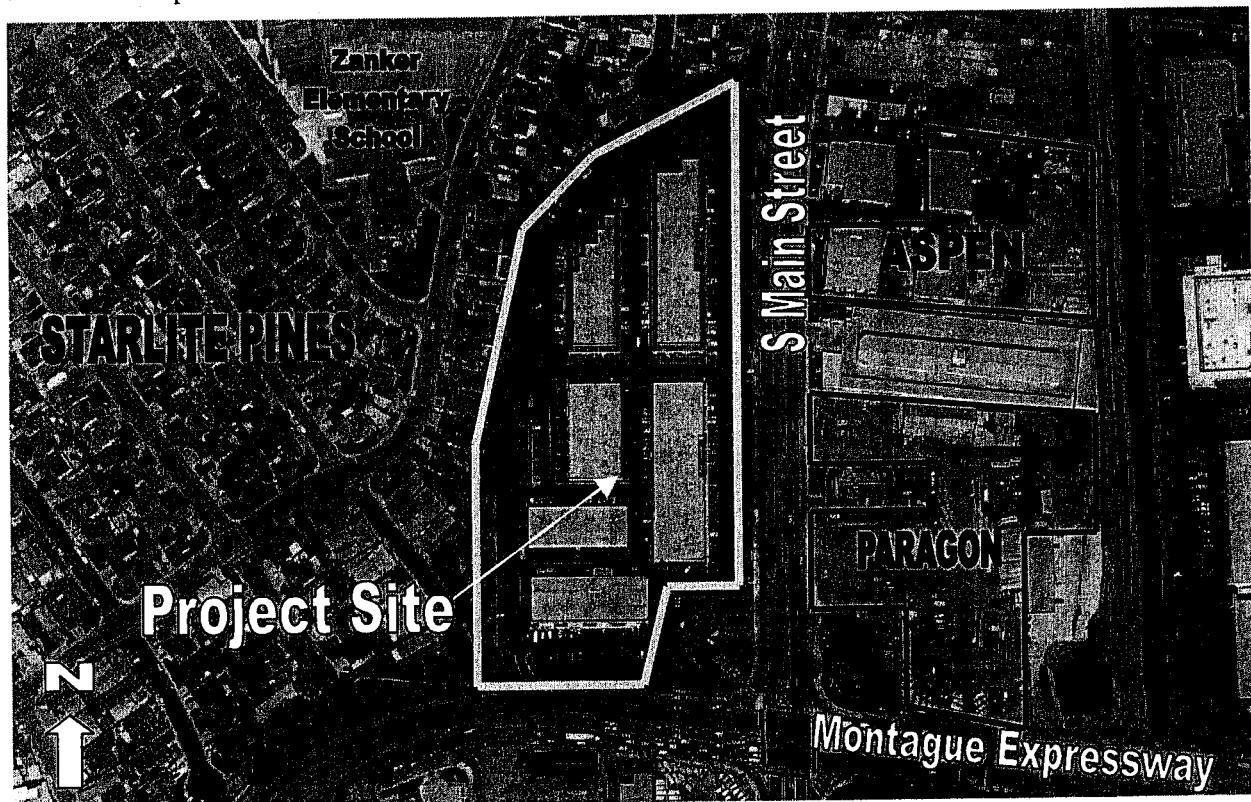
Use Permit approvals for a technical college, deli and gymnastics club. The industrial complex is currently named “South Bay Tech Center.”

### Site Description

The project site is located on an 11.17-acre parcel at the northwest corner of the intersection of South Main Street and Montague Expressway. There are six (6) multi-tenant industrial office buildings totaling 161,652 square feet in floor area.

North and west of the project site is the Starlite Pines single-family residential district. East of the project site, across South Main Street, are Global Premier’s Aspen affordable housing development (101 apartment units) and D.R. Horton’s Paragon condominium development (147 condominium units) as well as existing auto repair businesses, a self-storage facility, and Jack-in-the-Box drive-thru restaurant. There are two gas stations at the intersection of South Main Street and Montague Expressway: a Shell gas station on the northeast corner of the intersection and a Union 76 gas station on the northwest corner, adjacent to the Warmington Homes project site. South of the project site, across Montague Expressway and in the City of San Jose, are the Sleep Inn Hotel and U-Haul Moving and Storage on the southwest corner of the intersection and the Montague Technology Center industrial park on the southeast corner of the intersection. The Union Pacific Railroad line runs parallel to South Main Street, in a north-south direction, a quarter of a mile to the east of the project site.

The project site is located within the Midtown Specific Plan Area. The project site is located in the Redevelopment Area Amendment 8 District.



## THE APPLICATION

The applicant is requesting a General Plan Amendment, Midtown Specific Plan Amendment, Rezoning, Site Plan and Architectural Review, Major Tentative Map and Environmental Impact Assessment. The applicant is requesting approval of a Major Tentative Tract Map, pursuant to Section XI-1-4.00 (Tentative Map) of the Subdivision Ordinance. The applicant is requesting approval for a Site Plan and Architectural ("S" Zone") Approval pursuant to Section 42 of the Zoning Ordinance.

### Project Description

The approval of the project will allow for the demolition of an existing industrial park and the construction of 368 podium and townhouse style residential condominium units, on-site surface and podium parking, recreational and open space facilities on 11.17 acres.

Three podium style residential buildings are proposed along the South Main Street frontage with a total of 257 units. The podium buildings will have a partially subterranean garage and four stories of residential flats and townhouses of 1, 2 and 3 bedrooms that range in size from 809 square feet to 1,562 square feet. Seventeen townhouse style residential buildings are proposed along the northern, western and southern property lines with a total of 111 units. The townhouses will have a garage on the first floor and living areas on the second and third floors. The townhouse units will have 2 to 3 bedrooms that range in size from 1,192 square feet to 1,634 square feet.

Table 1: Proposed Residential Units

Podium/Townhouse	# of Units	Bedrooms	Living Area (SF)
Podium (Unit 1)	5	1	809
Podium (Unit 2)	125	2	1,195
Podium (Unit 3)	28	2	1,195
Podium (Unit 4)	11	3	1,536
Podium (Unit 5)	16	3	1,386
Podium (TH1)	4	3	1,562
Podium (TH2)	68	2	1,326
Townhouse (Unit B)	32	2	1,214
Townhouse (Unit D)	15	3	1,345
Townhouse (Unit G)	32	3	1,634
Townhouse (Unit H)	32	2	1,192

The project proposes recreational amenities, such as a pool, fitness rooms and a recreation building. The project offers generous open space and new landscaping. The existing tree canopy



along the northern and western property lines, which separates the development from the existing residential neighborhood, will be preserved and enhanced with new tree planting and the addition of a meandering path. Each of the residential buildings will have either a private courtyard space or landscaped paseos between the buildings for open space amenity. The streetscape design along South Main Street will incorporate the City's recently adopted South Main Street and South Abel Street Plan Line Study.

### **General Plan Amendment**

The applicant is requesting a General Plan Amendment for the project site. The existing land use designation is Industrial Park. The proposed land use designation is Multi-Family, Very High Density (31 to 40 dwelling units per acre.) There are 368 residential units proposed on 11.17 acres. The project meets the density requirement for the proposed land use designation at 33 dwelling units per acre. The applicant has stated in their project description how the General Plan Amendment would implement the Midtown Specific Plan vision "for a higher density transit oriented and pedestrian friendly Gateway to Milpitas."<sup>1</sup>

The project site is mainly surrounded by properties with a residential land use designation. The Starlite Pines neighborhood to the north and west is an established residential neighborhood with a land use designation of Single Family, Low Density (3 to 5 dwelling units per acre.) The properties to the east of the project site were redesignated Multi-Family, Very High Density (31 to 40 dwelling units per acre) with the adoption of the Midtown Specific Plan in 2002. The project site is the single industrial land use designation in the immediate vicinity, along South Main Street in the City of Milpitas. The applicant has stated in their project description that Warmington Capital Partners (SB Tech Center, LLC) acquired the project site in 2005 and has experienced "declining occupancy." The site "is a lone industrial area that is geared toward industrial and not residential serving businesses."<sup>2</sup>

### **Midtown Specific Plan Amendment**

The Midtown Specific Plan was adopted by the City Council on March 19, 2002 to guide the development and further evolution of the Milpitas Midtown Planning Area and encourage "development that responds to City and regional objectives, such as a compatible mixture of residential, retail and commercial uses."<sup>3</sup> With the adoption of the Midtown Specific Plan, the land use designation of a majority of the industrial and commercial properties along South Main Street and South Abel Street were redesignated to Mixed Use and Multi-Family, Very High Density. The density requirements were changed to 31 to 40 dwelling units per acre and up to 60 dwelling units per acre within the Transit Oriented Development Overlay.

The project site is located at the southern end of the Midtown Specific Plan Area. The land use designation of the South Main Street and South Abel Street corridor, between Great Mall Parkway and Montague Expressway, were redesignated to Multi-Family, Very High Density with the adoption of the Midtown Specific Plan and this area has experienced interest by many private investors to develop Multi-Family housing projects. Starting from the north, there is the

---

<sup>1</sup> Project Description, Warmington Homes

<sup>2</sup> Ibid

<sup>3</sup> Midtown Specific Plan, City of Milpitas

“Centria” development by D.R. Horton, “South Main Street” development by Matteson, “Bay Stone” development by Bay Stone, “Aspen” development by Global Premier and “Paragon” development by D.R. Horton. The Midtown Specific Plan retained the Industrial Park land use designation for the project site, however, the applicant is proposing to redesignate the land use to Multi-Family, Very High Density. The proposed Midtown Specific Plan Amendment would allow this parcel to be consistent with the existing surrounding residential land use designations within the area. (See Attachment A, Exhibit B)

### **Rezoning**

The applicant is requesting a rezoning for the project site for conformance with the proposed General Plan and Midtown Specific Plan land use designation changes. The existing zoning designation is MP-S - Industrial Park with “S” Zone Overlay District. The proposed zoning designation is R4-S - Multi-Family Very High Density with “S” Zone Overlay District.

#### ***Analysis for General Plan Amendment, Midtown Specific Plan Amendment and Rezoning:***

As stated above, the project site is surrounded by residential land uses. Given the presence of surrounding single-family and multi-family residential land uses, proximity to schools, major arterial streets and transit hubs and availability of public service capacity in the area, the proposed project and change in land use designation would result in a more compatible land use. If approved, the proposed General Plan Amendment, Midtown Specific Plan Amendment and Zone Change would be considered a logical land use designation, consistent with existing General Plan Guiding Principles and Implementing Policies.

Guiding Principle 2.a-G-2      Maintain a relatively compact urban form.

Guiding Principle 2.a-G-3      Provide for a variety of housing types and densities that meet the needs of individuals and families.

Implementing Policy 2.a-I-2      Promote development within the incorporated limits which acts to fill-in the urban fabric rather than providing costly expansion of urban services into outlying areas.

Implementing Policy 2.b-I-3      Provide housing opportunities in Milpitas by meeting the City’s regional fair-share housing obligations.

**Analysis:** The proposed General Plan Amendment is compatible with the Guiding Principles and Implementing Policies listed above because the development encourages a compact development with the use of higher densities, provides for a variety of housing types and densities to meet the demands of varying families, promotes in-fill development and provides housing opportunities in Milpitas by contributing to the City’s regional fair-share housing obligations.

If approved, the proposed General Plan Amendment, Midtown Specific Plan Amendment and Zone Change would be consistent with existing Midtown Specific Plan Goals and Policies.

Goal 1                                      Encourage a compatible mixture of residential, retail, office, service-oriented commercial and industrial uses within the Midtown area.

- |            |  |
|------------|--|
| Goal 2     | Provide for a significant component of new housing within the area in order to: improve the vitality of the Midtown Area; address local and regional housing needs; and reinforce the use of transit.                      |
| Goal 3     | Promote the intensity of development in the Midtown area that is appropriate to its central location.  |
| Goal 4     | Provide for a land use mix that supports major transit facilities.   |
| Policy 3.1 | Allow for up to 4,860 new housing units in Milpitas Midtown.   |
| Policy 3.4 | Establish a minimum density of 21 units per gross acre in the Mixed-Use District, 31 units per gross acre in the multifamily, very high density area and a minimum of 41 units per gross acre around the transit stations. |

Analysis: The proposed Midtown Specific Plan Amendment is compatible with the Goals and Policies listed above because the proposed project would ensure compatibility with residential land uses to the north, east and west, improve the vitality of the Midtown Area, addresses local and regional housing needs, contributes to new housing units in the Milpitas Midtown, increase use of transit and meets the minimum density requirement of the Multi-Family, Very High Density land use designation.

### **Major Tentative Tract Map**

The applicant is requesting a major tentative tract map for the subdivision of the existing 11.17-acre parcel to 20 condominium parcels totaling 368 residential condominium units. The open space parcels, private streets and private courts will be common parcels. The three podium buildings and the seventeen townhouse buildings will be located on individual parcels. The open space area will be subdivided into 27 parcels, the private street will be subdivided into four parcels and there will be eight private court parcels. These will all be considered as common parcels. The tentative map also includes proposed grading, utility and on/off-site improvements.

### **Conformance with the State Subdivision Map Act & Subdivision Ordinance**

The State Subdivision Map act defers to the local ordinance with respect to the approval of a tentative tract map. The City's Subdivision Ordinance requires design and improvement consistent with the General Plan. As previously analyzed in the Conformance with the General Plan section, the proposed project and tentative tract map are in conformance with the General Plan.

### **"S" Zone Application**

#### **A. Site and Architectural Compatibility with Surrounding Development**

##### **1) Site Layout**

As mentioned earlier in the staff report, the project proposes three podium style residential buildings along the South Main Street frontage with a total of 257 units. The podium buildings will have a partially subterranean garage and four stories of residential flats and townhouses.

Each podium building will have an inner courtyard space and inter-connectivity between the buildings via paseos between Podium Building A and B. Podium C is separated by a private street (Street B) with access to South Main Street.

Seventeen townhouse style residential buildings are proposed along the northern, western and southern property lines with a total of 111 units. The townhouses will have a garage on the first floor and living areas on the second and third floors. The townhouse buildings range from 5-plex to 8-plex buildings. Most of the buildings are separated by a paseo with common open space area or by a private court with vehicle access to each of the townhouse garages. The typical separation between face of garage to face of garage is 28 feet with a 20-foot drive aisle.

The recreation building and the pool will be located to the west of Podium Building C.

The project site will be served by a private street system with two accesses from South Main Street, two emergency vehicle accesses (EVA's) and a private street/court system within the project. The private streets have a typical drive aisle width of 22 to 28 feet. The northern access on South Main Street will be a new four-way signalized intersection with the Aspen development on the east side of South Main Street. The southern most access on South Main Street will be a 35-foot EVA only access. The existing right turn lane into the project site on Montague Expressway will be modified to be an EVA only access. A new six-foot high pre-cast sound wall will be installed along the southern property line within the street side setback, approximately 15 feet from the townhouse buildings.

The project will be served by a pedestrian pathway system (sidewalks, crosswalks and paseos) that links the buildings to the public streets, transit, recreational amenities and private open space areas. A meandering path will be implemented along the northern and western perimeter with linkage to the paseos between the buildings and recreational area. There is a pre-existing six-foot high perimeter wall along the northern and western property lines. The applicant proposes a pedestrian connection through a controlled access gate to Greenwood Way for quick access to the Starlite Pines Neighborhood and Zanker Elementary School for residents.

The proposed layout maximizes density, provides for adequate access for emergency service vehicles, provides pedestrian access and walk-ability throughout the site, and provides for building variety and interest along South Main Street.

## **2) Building Architecture**

The project has been designed in the Spanish Colonial Revival style that characterizes older towns throughout California, many examples of which exist in the San Francisco Bay Area. This style evolved from the more simplistic Mission Revival style. The podium buildings are four stories and incorporate various architectural treatments reflecting the Spanish Colonial Revival and Mission Revival styles such as low-pitched tile roofs, stucco walls, multi-paned windows, paired windows, tower elements, dormers and arcaded porches. The elevation of the podium buildings along South Main Street is over 200 feet long. However, the building design is well articulated with a consistent style, changes in roof heights and vertical planes to reduce mass, use of balconies and varied building silhouettes, which are all consistent with the Midtown Specific Plan Design Guidelines.

Estrella's townhouse buildings, which tend toward the more rustic end of the range, co-exist comfortably with the community's more formal and ornate podium and recreation buildings.

### 3) Landscaping

The project offers generous new landscaping throughout the development. Most of the landscaping is in the setback areas along the perimeter of the project site and around each of the podium buildings, townhouse buildings and recreation building. The existing tree canopy along the northern and western property lines, which separates the development from the existing residential neighborhood, will be preserved and enhanced with new tree planting and the addition of a meandering path.

A Tree Report, prepared by HortScience, Inc., revealed that there are 343 trees existing onsite. Almost 75% of the trees were surveyed to be in good condition. However, based on the potential impacts of the construction of which “the most significant impacts to the trees would occur as a result of the excavation and grading of the central portion of the site for road, building and underground garage construction,”<sup>4</sup> HortScience, Inc., recommends the preservation of 107 trees around the perimeter of the site, including 54 “Protected” trees and the removal of 236 trees, including 103 “Protected” trees with a mitigation measure to replace the removed trees with 252 new trees. *Staff recommends* that all tree removals, mitigation and preservation shall adhere to the recommendations of the Tree Report prepared by HortScience, Inc., dated March 2007.

### 4) Streetscape

The streetscape design along South Main Street will incorporate the City's recently adopted South Main Street and South Abel Street Plan Line Study. The improvements will include the removal and replacement of existing sidewalks, trees and lighting in front of the development and the installation of a new raised median island with lighting, landscaping and irrigation. Special paving treatments are proposed at vehicular entry points into the development.

### 5) Parking

The project proposes a partially subterranean garage for the podium buildings with a total of 538 parking spaces for the 257 condominium units and guest parking. There will be a mix of tandem-type spaces and standard parking spaces.

The project proposes 222 parking spaces for the 111-townhouse units. All of the resident parking is provided on the first floor with a mix of tandem-type garages and conventional two-car garages depending on the unit type.

In addition to the guest parking spaces provided in the podium structure, there will be 85 surface guest parking spaces provided in front of the recreation building and on the private streets. The total parking spaces required for the project is 843 parking spaces (733 residential parking + 110 guest parking.) The project provides 845 total parking spaces (733 residential + 112 guest parking spaces.) The project also proposes 43 bicycle parking spaces in podium building garages and surface locations.

---

<sup>4</sup> Tree Report, HortScience, Inc.

## 6) Park & Open Space

The applicant is proposing a total of 0 acres of public park space and 3.42 acres of private open space. The total balcony space for 368 units is 0.67 acres. The total courtyard space in the podium buildings is 0.89 acres. The remainder, 1.86 acres, is made up of the recreation area, paseos, private park space along the northern and western property line. The Midtown Specific Plan requires 200 square feet of usable open space per unit. The project proposes approximately 400 square feet of usable open space per unit.

The proposed development is located in the Midtown Specific Plan Area and is required to provide public and private park space at a ratio of 3.5 acres per 1,000 population. Based on the park fee calculation, the total required park space to be dedicated is 3.25 acres of which 1.86 acres should be public park space and 1.39 acres should be private park space.

Section XI-1-9.08 of the Subdivision Ordinance allows for “private open space for park and recreational purposes ~ privately owned and maintained by the future residents of the subdivision” to be credited against the requirement of dedication for park and recreation purposes or the payment of fees in lieu provided that the City Council “finds it in the public interest to do so” and the following standards are met:

- 9.08-1 That yards, court areas, setbacks and other open areas required to be maintained by the zoning and building regulations shall not be included in the computation of such private open space; and
- 9.08-2 That the private ownership and maintenance of the open space is adequately provided for by written agreement; and
- 9.08-3 That the use of the private open space is restricted for park and recreational purposes by recorded covenants which run with the land in favor of the future owners of property within the tract and which cannot be defeated or eliminated without the consent of the City Council; and
- 9.08-4 That the proposed private open space is reasonably adaptable for use for park and recreational purposes, taking into consideration such factors as size, shape, topography, geology, access, and location of the private open space land; and
- 9.08-5 That facilities proposed for the open space are in substantial accordance with the provisions of the recreational element of the general plan, and are approved by the City Council.

Based on these standards, the open space areas designated for recreation purposes and park like area along the northern and western property lines, totaling 1.52 acres, can be credited for private open space. **Staff recommends** that prior to building permit issuance, the applicant shall pay a park-in-lieu fee in the amount of \$747,925.

## 7) Solid Waste

The project proposes a private trash and recycle collection program identical to the programs used at the existing Parc Metro and Parc Place residential projects. Each podium building has two trash chute rooms on each floor and the trash is collected by the contractor in the garage floor and moved to the trash compactor. For the townhouse units, a storage area to accommodate recycle and trash bins would be located within each private garage. The residents would place the bins in front of the garage on the designated collection day and the contractor would collect the bags from the bins and place in the trash compactor within the trash enclosure. A trash enclosure is proposed to be located adjacent to the EVA and between Podium Building A and the Union 76 Gas Station. The trash enclosure will be designed to tie in to the existing sound wall and screened with landscaping so as not to call attention to the enclosure.

## 8) Stormwater Runoff

The new C.3 Stormwater requirements require developments over 10,000 square feet in size to treat stormwater runoff before it discharges into City storm drains or creeks. Surface runoff is required to be reduced and treated for pollutants. Consistent with this, the applicant has submitted a Stormwater C.3 Report prepared by Ruggeri-Jensen-Azar & Associates, dated April 2, 2007. The project proposes to use the following BMP applications: “self-retaining areas, diverting roof water to infiltration areas, biofilter/swale areas, and the introduction of mechanical treatment devices for those areas within specific project constraints.”<sup>5</sup>

## B. Conformance with Zoning Ordinance

Pursuant to Section XI-10-8.05 of the Zoning Ordinance, the project conforms with the land use and development standards of the “R4” – Multi-Family Very High Density zoning district as shown on Table 2 below:

Table 2: Zoning District Compliance

Zoning Code Development Standards	Proposed Project	Complies?
Residential Density = 31 to 40 dwelling units / acre	33 dwelling units / acre	Yes
Building Height <ul style="list-style-type: none"> <li>4 stories</li> <li>60 feet (including towers)</li> </ul>	<ul style="list-style-type: none"> <li>Podium: 55' 7 ¾" with towers (4 stories + subterranean garage)</li> <li>Townhouse: 34' 8 ½" (3 stories)</li> <li>Recreation Building: 23' (1 story)</li> </ul>	Yes
Parking Requirement = 843 <ul style="list-style-type: none"> <li>Residential = 733</li> <li>Guest = 110</li> </ul>	Parking Provided = 845 <ul style="list-style-type: none"> <li>Residential = 733</li> <li>Guest = 112</li> </ul>	Yes
Front & Street Side Setbacks = 8 to 15 feet from back of 10 foot sidewalk	<ul style="list-style-type: none"> <li>Front Setback – varies 15 feet ~ 22 feet due to building design and articulation to break up</li> </ul>	Yes

<sup>5</sup> Stormwater C.3 Report, RJA

	massing <ul style="list-style-type: none"> <li>▪ Street Side Setback – varies 15 feet ~ 22 feet due to building design and articulation to break up massing</li> </ul>	
Interior & Rear Setbacks = 10 feet	14 feet ~ 40 feet	Yes
Park & Open Space = 3.25 acres required <ul style="list-style-type: none"> <li>▪ Public = 1.86 acres</li> <li>▪ Private = 1.39 acres</li> </ul> Other open space requirements <ul style="list-style-type: none"> <li>▪ 200 SF per unit</li> <li>▪ 25% of net acres = 2.79 acres</li> </ul>	<ul style="list-style-type: none"> <li>▪ Public = 0 acres</li> <li>▪ Private = 3.42 acres             <ul style="list-style-type: none"> <li>○ 0.67 acres of balcony space for 368 units</li> <li>○ 0.89 acres of courtyard space for the podium buildings</li> <li>○ 1.86 acres of common open space (recreation area, paseos, private park space along the northern and western property line)</li> </ul> </li> </ul>	Yes, see analysis on P.10
Utilities: Setback from street, screened with landscape or other material, located in a single area, in wells, underground, etc.	Staff will ensure conformance upon review of Site Improvement Plans for Building Permit.	TBD

### C. Conformance with Midtown Specific Plan

All proposed projects in the Midtown Area subject to an “S” Zone Approval require compliance with the Midtown Specific Plan Development Standards and Design Guidelines. No S-Zone approval shall be issued by the City without the decision making body making the following findings:

“The proposed project conforms to the intent and the specific requirements of the Midtown Specific Plan, including the Development Standards and Design Guidelines.”<sup>6</sup>

As analyzed in the “S” Zone Application section of this report which included Site and Architectural Compatibility as well as Conformance with the Zoning Ordinance, the proposed project complies with the “R4” zoning district development standards and requirements as well as with the Development Standards and Design Guidelines of the Midtown Specific Plan.

<sup>6</sup> Milpitas Midtown Specific Plan, March 19, 2002.



### **Conformance with Affordable Housing Policy**

The City of Milpitas General Plan Housing Element and Midtown Specific Plan Policy requires 20% affordable housing within each residential development project. For the proposed 368 unit project, a total 74 affordable housing units are required. The applicant is proposing a joint partnership with Global Premier's Aspen Apartments (100 affordable housing units with 100% affordability), which has been previously approved by the Planning Commission on March 14, 2007 (Use Permit No. UP2006-22 and "S" Zone Approval No. SZ2007-1). The 74 affordable units will be allocated from Aspen Apartments to Warmington Homes project to comply with the City affordable housing policy.

The total number of 94 affordable housing units required would be required by both projects (20 units by Aspen Apartments and 74 units by Warmington Homes), whereas Aspen Apartments is providing 100 affordable units. In return for the affordable housing allocation by Aspen Apartments, Warmington Homes has agreed to build Aspen Apartments' required sidewalk frontage and street improvements consistent with the City's South Main Street & South Abel Street Plan Line Study (including the installation of sidewalks, streetlights, trees & planting materials, median islands, irrigation and electrical enhancements and streetscape furniture installation).

If the Aspen Apartments development is not constructed, Warmington Homes will be required to provide the 74 affordable housing units on their site or provide the Milpitas Redevelopment Agency with an in-lieu housing fee of \$5,920,000 (74 units x \$80,000 average level of affordable housing subsidy/per unit). The legal agreements and obligations of both parties will be through the Owner Participation Agreement that will be required to be approval by the City Council/Redevelopment Agency.

### **Conformance with CEQA**

A Supplemental Environmental Impact Report (SEIR) for the Estrella proposal has been prepared to disclose environmental impacts to meet the requirements of the California Environmental Quality Act (CEQA). A Draft SEIR (DSEIR) must be circulated for public review and comment for a minimum of 45 days prior to any action being taken on the project. The review/comment period began on November 2, 2006 and ended December 16, 2006. A public comments meeting was also held on December 15, 2006 to receive testimony and comments regarding the DSEIR. All written and oral comments received during the comment period have been responded to in the Final Supplemental Environmental Impact Report (Final SEIR). The Final SEIR was published on March 30, 2007. The Final SEIR and the DSEIR together constitute the complete Environmental Impact Report.

An EIR is an objective informational document to inform the public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. A public agency shall consider the information in the EIR along with other information that may be presented to the agency regarding the proposed project. An EIR regarding a proposed amendment of the General Plan will focus on the secondary effects that can be expected to follow from the amendment. However, the EIR may not be as detailed as an EIR on a specific construction project. An EIR should include a sufficient degree of analysis to provide decision makers enough

information to consider the environmental consequences of the proposed project. The Estrella SEIR identified potentially significant environmental impacts to transportation and circulation, air quality, noise and vibration, utilities, and public services; however most impacts could be mitigated to a less than significant level through conformance with the identified City policies. More specific mitigation measures conforming to the policies would be incorporated into or required of a development/construction proposal as a condition of approval.

A more detailed description of the above potential impacts and mitigation measures are described in the DSEIR and the Final EIR previously sent to Planning Commission.

The EIR has identified the following project impacts as significant unavoidable impacts that cannot be mitigated to a less than significant level:

**Supplemental Impact UTL-1: Water supply.** The proposed project would require additional sources of domestic water not presently anticipated in the City's Water Master Plan. DSEIR p.29.

**Supplemental Impact UTL-2: Wastewater treatment and sewage pumping capacity.** The proposed project could exceed wastewater treatment capacity not presently anticipated in the City's Water Master Plan and exceed the pumping capacity of the City's Main sewer pump station. DSEIR p. 30.

**Supplemental Impact PARK-1: Provision of public parks.** The proposed project should provide approximately 3.62 acres of public parkland based on the standard of 3.5 acres of parks per 1,000 residents established in the Midtown Specific Plan, which would be reduced based on credit for on-site facilities as allowed by the City of Milpitas Parks Department. DSEIR p.33.

**Supplemental Impact TRA-1: Future roadway segment impacts.** In the year 2030, traffic generated by the proposed project along with other buildout traffic, would cause the roadway segments of Montague Expressway between South Main Street and I-880 (westbound) and South Main Street between Montague Expressway and South Abel Street (northbound and southbound) to exceed traffic thresholds of significance during the AM peak hour. This impact would include segments of Montague Expressway between McCarthy Boulevard and I-880 (eastbound) and South Main Street between South Abel Street to Montague Expressway (northbound and southbound) in the PM peak. DSEIR p.47.

**Supplemental Impact AIR-1: Building demolition.** Demolition of existing structures on the site would generate fugitive particulate matter emissions that would temporarily affect local air quality. DSEIR p. 60.

**Supplemental Impact AIR-2: Regional air emissions.** The project would result in a small increase in the regional emissions associated with development of the Midtown Specific Plan. The increase in emissions would be less than the BAAQMD significance thresholds, but the impacts of the Midtown EIR would be significant and unavoidable. DSEIR p. 61.

**Supplemental Impact AIR-3: Cumulative air emissions.** The project would result in a small increase in the regional emissions associated with development of the Midtown Specific Plan. The increase in emissions would be less than the BAAQMD significance thresholds, but the cumulative impacts of the Midtown Specific Plan would be significant and unavoidable. DSEIR p.62.

**Supplemental Impact NOISE-1: construction noise impacts.** Activities required to demolish existing improvements on the project site and construct townhouses and condominiums would result in significant noise generation for adjacent sensitive receptors. DSEIR p. 68.

**Supplemental Impact NOISE-2: Land use compatibility impacts.** Many of the buildings in the proposed Estrella complex would be exposed to exterior noise levels of between 60 and 75 DNL dBA. Two of the proposed buildings would be exposed to an exterior noise level greater than 75 DNL dBA. Balconies on the townhome and podium buildings fronting on South Main Street, as well as other balconies in buildings along Montague Expressway may also be exposed to noise levels greater than acceptable (DNL of 65 dBA) under the Noise Element. Excessive noise may also result if air conditioning equipment is placed on balconies. DSEIR p.70.

**Supplemental Impact NOISE-3: Stationary noise impacts.** Noise generated by exterior equipment, including pool equipment, would be audible to properties off of the project site. DSEIR p 71.

Pursuant to Public Resources Code Section 15093, a Statement of Overriding Considerations must be adopted for each of the above significant unavoidable impacts before approval of the proposed General Plan amendment. The Statement of Overriding Considerations must include findings that there are specific overriding economic, legal, social, technological or other benefits of the project which outweigh the significant effects on the environment. This is in addition to the required findings regarding significant effects that can be mitigated.

### **Neighborhood Compatibility**

The project site is situated in an area consisting of an established residential neighborhood to the north and west and new residences under development to the east. There are also existing commercial businesses across South Main Street to the east and south and existing industrial businesses inside the project site, South Bay Tech Center.

The applicant conducted six community engagement meetings to provide information about the developer and proposed project, gather neighborhood input and create a dialogue with the existing community. The following is a list of the meetings that were conducted:

- o June 5, 2006 – Community Center - Meeting with Starlite Pines HOA Board
- o October 9, 2006 – Community Center - Meeting with Starlite Pines HOA Board
- o November 7, 2006 - Zanker Elementary School - Neighborhood Meeting
- o December 15, 2006 - City Hall Committee Room - EIR Public Comment Meeting
- o January 5, 2007 – City Hall Building Conference Room - Meeting with Specific Neighbors (Philip & Helen Tuet, Don Clendenin)

- o February 5, 2007 – Community Center - Meeting with Specific Neighbors (Philip & Helen Tuet, Robert & Debbie Armstrong, others.)

The residents raised many concerns throughout this engagement process. Concerns ranged from proposed building heights, loss of privacy, increase in traffic that may occur in the neighborhood, density, parking, need for commercial services and school impact.

Since the proposed development would require the demolition of the existing industrial buildings on the site, the applicant has stated a desire to replant the trees along the exterior rear property line (adjacent to the homes at Starlite Pines) in order to start allowing the trees to mature in advance of the homes being built to attempt to address the privacy issues stated by several residents at the community meetings.

Based on the analysis and conclusions of this report, the proposed project is not anticipated to have adverse impacts on the parking, traffic, noise or be detrimental to the health and safety of the public. In addition, as conditioned, the project will not have adverse effects upon the adjacent or surrounding development, such as shadows, view obstruction or loss of privacy that are not mitigated to acceptable levels.

## RECOMMENDATION

Close the Public Hearing. Based on the Findings and subject to Recommended Special Conditions below, approve and adopt the following: Resolution No. 501 recommending approval of General Plan Amendment No. GM2006-1 and Midtown Specific Plan Amendment to City Council, Resolution No. 502 recommending approval of Zone Change No. ZC2006-1 to City Council, Resolution No. 503 recommending the certification of the Supplemental Environmental Impact Report (Environmental Impact Assessment) No. EA2006-4 to City Council, recommend approval of Major Tentative Map No. MA2006-2 to City Council, and Site Plan and Architectural Approval No. SZ2006-5.

## FINDINGS FOR SITE AND ARCHITECTURAL REVIEW APPROVAL (SZ2006-5)

1. As described in this staff report and in Resolution 503 and the findings attached thereto, a Supplemental Environmental Impact Report has been prepared for this project in accordance with the provisions of CEQA.
2. As conditioned, the project development is consistent with the City of Milpitas General Plan in terms of land use and density because the proposed project is a multi-family residential project with a proposed density of 33 dwelling units per acre.
3. As conditioned, the proposed development is consistent with the City of Milpitas Zoning Ordinance in terms of land use and development standards for Multi-Family, Very High Density zoning with an "S" Zone Overlay District because the proposed development is a very high density residential development that promotes a pedestrian friendly environment.
4. As conditioned, the proposed development is consistent with the intent and specific requirements of the Midtown Specific Plan in that it complies with the development standards of the "R4" zoning district, the Midtown Specific Plan's Land Use Goals and is in

conformance with the specific requirements of the Development Standards and Design Guidelines.

5. As conditioned, the proposed residential development will not be detrimental or injurious to the public health, safety, and general welfare to future residents and to the surrounding community because the project includes the construction of a high quality, high density use in a residentially designated neighborhood.

## **SPECIAL CONDITIONS**

1. “S” ZONE APPROVAL: This “S” Zone Approval No.SZ2006-5 is for a multi-family residential development for 368 condominium units and associated site improvements in accordance with the plans approved on April 11, 2007, and as amended by the conditions below. Any modification to the project as proposed will require an “S” Zone Approval Amendment by the Planning Commission. Minor modifications can be submitted to the Planning Division for processing as per Section 42 of the Milpitas Municipal Code. (P)
2. GENERAL: This use shall be conducted in compliance with all appropriate local, state, and federal laws and regulations, and in conformance with the approved plans. (P)
3. ENVIRONMENTAL: Supplemental Impact UTL-1: Water supply. The proposed project would require additional sources of domestic water not presently anticipated in the City’s Water Master Plan. (DSEIR p.29.)

Mitigation: The project developer shall purchase additional water supplies to support the proposed development, including costs of capacity and storage needs above Water Master Plan capacities, as determined by the City. (P)

4. ENVIRONMENTAL: Supplemental Impact UTL-2: Wastewater treatment and sewage pumping capacity. The proposed project could exceed wastewater treatment capacity not presently anticipated in the City’s Water Master Plan and exceed the pumping capacity of the City’s Main sewer pump station. (DSEIR p. 30.)

Mitigation: The developer shall purchase adequate public system wastewater treatment capacity to serve the proposed project, as well as fair share fees to replace or upgrade the Main sewer pump station, as determined by the City. The project developer shall provide the City of Milpitas with documentary evidence that adequate facilities for wastewater treatment and collection are available to serve the project prior to planning permit approval. (P)

5. ENVIRONMENTAL: Supplemental Impact PARK-1: Provision of public parks. The proposed project should provide approximately 3.62 acres of public parkland based on the standard of 3.5 acres of parks per 1,000 residents established in the Midtown Specific Plan, which would be reduced based on credit for on-site facilities as allowed by the City of Milpitas Parks Department. (DSEIR p.33.)

Mitigation: The Project developer shall pay park dedication in-lieu fees to the City of Milpitas for the required on-site dedication of public parks. (P)

6. ENVIRONMENTAL: Supplemental Impact TRA-1: Future roadway segment impacts. In the year 2030, traffic generated by the proposed project along with other buildout traffic, would cause the roadway segments of Montague Expressway between South Main Street and I-880 (westbound) and South Main Street between Montague Expressway and South Abel Street (northbound and southbound) to exceed traffic thresholds of significance during the AM peak hour. This impact would include segments of Montague Expressway between McCarthy Boulevard and I-880 (eastbound) and South Main Street between South Abel Street to Montague Expressway (northbound and southbound) in the PM peak. (DSEIR p.47.)

Mitigation: The proposed project shall to pay a “fair share” fee toward the Montague Expressway Widening project for the roadway segment impacted along Montague Expressway and a “fair share” fee toward the Midtown Specific Plan for the South Main Street roadway segment. (P)

7. ENVIRONMENTAL: Supplemental Impact AIR-1: Building demolition. Demolition of existing structures on the site would generate fugitive particulate matter emissions that would temporarily affect local air quality. (DSEIR p. 60.)

Mitigation: The following dust control measures shall be included on demolition plans and specifications by contractors during demolition of existing structures:

- a) Watering should be used to control dust generation during demolition of structures and break-up of pavement.
  - b) Cover all trucks hauling demolition debris from the site.
  - c) Use dust-proof chutes to load debris into trucks whenever feasible. Watering should be used to control dust generation during transport and handling of recycled materials. (P)
8. ENVIRONMENTAL: Supplemental Impact AIR-2: Regional air emissions. The project would result in a small increase in the regional emissions associated with development of the Midtown Specific Plan. The increase in emissions would be less than the BAAQMD significance thresholds, but the impacts of the Midtown EIR would be significant and unavoidable. (DSEIR p. 61.)

Mitigation: The BAAQMD has identified mitigation measures for reducing vehicle emissions from residential projects. Measures to assist in reducing vehicle and other emissions include:

- a) Consider providing a satellite telecommuting center within or near the proposed development.
- b) Provide secure and conveniently placed bicycle parking and storage facilities.
- c) Allow only natural gas fireplaces.
- d) Provide direct, safe, attractive pedestrian access from project land uses to transit stops and adjacent development.

- e) Utilize reflective (or high albedo) and emissive roofs and light colored construction materials to increase the reflectivity of roads, driveways, and other paved surfaces, and include shade trees near buildings to directly shield them from the sun's rays and reduce local air temperature and cooling energy demand.
  - f) Provide physical improvements, such as sidewalk improvements (if needed), landscaping and bicycle parking that would act as incentives for pedestrian and bicycle modes of travel. (P)
9. ENVIRONMENTAL: Supplemental Impact AIR-3: Cumulative air emissions. The project would result in a small increase in the regional emissions associated with development of the Midtown Specific Plan. The increase in emissions would be less than the BAAQMD significance thresholds, but the cumulative impacts of the Midtown Specific Plan would be significant and unavoidable. (DSEIR p.62.)

Mitigation: The BAAQMD has identified mitigation measures for reducing vehicle emissions from residential projects. Measures to assist in reducing vehicle and other emissions include:

- a) Consider providing a satellite telecommuting center within or near the proposed development.
  - b) Provide secure and conveniently placed bicycle parking and storage facilities.
  - c) Allow only natural gas fireplaces.
  - d) Provide direct, safe, attractive pedestrian access from project land uses to transit stops and adjacent development.
  - e) Utilize reflective (or high albedo) and emissive roofs and light colored construction materials to increase the reflectivity of roads, driveways, and other paved surfaces, and include shade trees near buildings to directly shield them from the sun's rays and reduce local air temperature and cooling energy demand.
  - f) Provide physical improvements, such as sidewalk improvements (if needed), landscaping and bicycle parking that would act as incentives for pedestrian and bicycle modes of travel. (P)
10. ENVIRONMENTAL: Supplemental Impact NOISE-1: construction noise impacts. Activities required to demolish existing improvements on the project site and construct townhouses and condominiums would result in significant noise generation for adjacent sensitive receptors. (DSEIR p. 68.)

Mitigation: To reduce daytime noise impacts due to construction, the project sponsor shall require construction contractors to implement the following measures:

- a) Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).

- b) Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures to the extent feasible.
- c) Monitor the effectiveness of any noise attenuation measures by taking noise measurements to the extent there are persistent and on-going complaints.

Prior to the issuance of building permit, along with the submission of construction documents, the project sponsor shall submit to the City Building Department a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:

- d) A plan for posting signs on-site pertaining to permitted construction days and hours and complaint procedures and who to notify in the event of a problem;
- e) A listing of telephone numbers (during regular construction hours and off-hours);
- f) The designation of an on-site construction complaint manager for the project;
- g) Notification of neighbors at least 30 days in advance of pile-driving and/or other extreme noise-generating activities about the estimated duration of the activity; and
- h) A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed. (P)

11. ENVIRONMENTAL: Supplemental Impact NOISE-2: Land use compatibility impacts. Many of the buildings in the proposed Estrella complex would be exposed to exterior noise levels of between 60 and 75 DNL dBA. Two of the proposed buildings would be exposed to an exterior noise level greater than 75 DNL dBA. Balconies on the townhome and podium buildings fronting on South Main Street, as well as other balconies in buildings along Montague Expressway may also be exposed to noise levels greater than acceptable (DNL of 65 dBA) under the Noise Element. Excessive noise may also result if air conditioning equipment is placed on balconies. (DSEIR p.70.)

Mitigation: The following shall be incorporated into construction plans and specifications to ensure that City and State noise exposure levels are met:

- a) Sound rated windows and mechanical ventilation systems shall be required for residences that exceed City and State noise levels.
- b) For small balconies and decks in buildings near the adjacent roadways, solid balcony railings or partial enclosures may be needed to meet acceptable levels if the outdoor standard is applied to these areas. In some dwellings that are close to adjacent roadways, decks may need to be enclosed or solid railings of up to seven feet in height may need to be installed to meet the standard. If acceptable noise levels cannot be met, balconies shall be removed.



- c) Air conditioning equipment shall be placed in side yards of dwellings and shielded so as not to exceed a DNL of 65 dBA or otherwise increase the Ldn by more than 3 dBA, whichever is more restrictive.
- d) A follow-up acoustical analysis shall be prepared during the architectural design phase and submitted to the City of Milpitas Building Division demonstrating show how the City exterior and interior standards are met. (P)

12. ENVIRONMENTAL: Supplemental Impact NOISE-3: Stationary noise impacts. Noise generated by exterior equipment, including pool equipment, would be audible to properties off of the project site. (DSEIR p 71.)

Mitigation: Mechanical equipment associated with the pool shall be designed so as to not exceed a DNL of 58 dBA at the adjacent property line. This would limit any increase in the DNL to less than 3 dBA and be consistent with the City standard. Specific measures to limit stationary sources could include muffling equipment, selecting low noise generating equipment and shielding significant noise sources.

In addition, air-conditioners shall be designed so as to not exceed a DNL of 65 dBA or increase existing ambient noise levels by more than 3 dBA at adjacent units. This may require that air-conditioners not be allowed on certain balconies. Possible solutions include selection of quiet air-conditioners, placement of air conditioning units on the roof of buildings or placement of the air conditioners at ground level next to buildings. In some cases air conditioning units may need to have acoustical screening (e.g. noise barriers) to allow the units to operate and not significantly increase ambient noise levels. (P)

13. PARK FEES: Prior to building permit issuance, the applicant shall pay a park-in-lieu fee in the amount of \$747,925. (P)
14. PJ ACCOUNT: If at the time of application for building permit, there is a past due project job account balance owed to the City for recovery of review fees, review of permits will not be initiated until the balance is paid in full. (P)
15. PJ ACCOUNT: If at the time of application for certificate of occupancy, there is a project job account balance due to the City for recover of review fees, review of permits will not be initiated until the balance is paid in full. (P)
16. PAVERS & ACCENT TILES: Prior to building permit issuance, the applicant shall submit details of the decorative paving material for the sidewalks, crosswalks, vehicular entry, paseos and details of the tile accents to be used on the paseo pedestrian entry structure. (P)
17. NOISE: Prior to building permit issuance, a detailed noise analysis will be required to determine the building upgrades necessary to keep the interior noise levels below 45 dB Ldn. The analysis shall include, noise sources between residential units as well as between mechanical/utility rooms. (P)

18. LIGHTING: Prior to building permit issuance, the applicant shall submit details and elevations of all site lighting fixtures to the Planning Division for review and approval. (P)
19. SIGNAGE: Prior to approval of any signage for the multi-family development, proper applications, depending on signage type will need to be submitted to the Planning Division. (P)
20. LANDSCAPE: All planter areas (including containerized planters) shall be serviced by a sprinkler or drip system. (P)
21. LANDSCAPE: All required landscaping, as approved on the final landscape plan, shall be replaced and continuously maintained as necessary to provide a permanent, attractive and effective appearance. (P)
22. LANDSCAPE: Prior to certificate of occupancy permit issuance, all required landscaping shall be planted in place. (P)
23. LANDSCAPE: All landscape planters adjacent to vehicle parking areas or travel lanes shall be contained by a full depth (6" above AC to bottom of structural section of adjacent paving) concrete curb. Where landscape planters abut a public street, a 24-inch deep water barrier shall be installed behind the curb. (P)
24. TREE REMOVAL: Prior to the removal of any trees with a Diameter Breast Height of 12" or greater, the applicant shall obtain tree removal permits from the Trees and Landscape Section of the City of Milpitas Public Works Department. All tree removals, mitigation and preservation shall adhere to the recommendations of the Tree Report prepared by HortScience, Inc., dated March 2007. (P)
25. STREETSCAPE PLAN: Prior to building permit issuance, the applicant shall submit streetscape plans reflecting the recently adopted South Main Street and South Abel Street Plan Line Study.
26. AFFORDABLE HOUSING: Prior to the issuance of any permit, the applicant shall provide documentation to the approval of the City Attorney that the following 74 affordable housing units (20% of total number of units: 368) will be available at a housing cost affordable to very low-income households. (P)
27. AFFORDABLE HOUSING: If the Aspen Apartments Project is not constructed (in which 74 affordable housing units from the project will be allocated to Warmington Homes to meet its required 20% affordable housing obligation), Warmington Homes shall be required to provide the 74 affordable housing units on their site or pay the City of Milpitas a in-lieu housing fee in the amount of \$5,920,000 (74 units x \$80,000 average level of subsidy from the Milpitas Redevelopment Agency). (P)

28. AFFORDABLE HOUSING: The applicant shall provide the following information as it relates to the number of affordable housing units, types of units (two and three bedrooms) and the income levels of the proposed affordable housing units as illustrated below. (P)

Income Level	No. of Units	Type
Very Low (*)	74	2 & 3 bedrooms (*)

(\*) Per Aspen Apartments Project Approval

29. AFFORDABLE HOUSING: As part of the identified public benefit for this project, prior to issuance of building permits, the following conditions shall be met:

The applicant shall provide to the City of Milpitas Housing Division documentation that the 74 affordable housing units have been provided on or off-site. If the affordable housing units are provided on the Warmington Homes site, the affordable housing units shall be dispersed equally throughout the development and shall contain the same architectural features, design and amenities as the fair market rate units in the development. (P)

30. AFFORDABLE HOUSING: Income eligibility for the required number of affordable units shall be determined pursuant to the California Health and Safety Code Sections 50079.5, 50093 and 50105, which provide that the very low limits established by the U.S. Department of Housing and Urban Development (HUD) are the state limits for that income category. (P)
31. AFFORDABLE HOUSING: The applicant and the City of Milpitas shall enter into Restriction Agreements that outline the provisions for maintaining the long-term affordability of the required affordable rental units. The Restriction Agreements shall be approved to form by the Milpitas City Attorney's Office, executed by the City Manager and recorded with the County of Santa Clara. (P)
32. AFFORDABLE HOUSING: The Restriction Agreements shall require that the long-term affordability of the rental housing units shall remain in effect for 55 years. Any change to this requirement is subject to review and approval by the Milpitas City Council.
33. AFFORDABLE HOUSING: The applicant shall work with the Housing Division staff in establishing and determining the waiting list of eligible residents that are qualified for the project. (P)
34. AFFORDABLE HOUSING: The established affordable rents for the rental apartment shall be pursuant to income eligibility provided by the California Health and Safety Code Sections 50079.5, 50093 and 50105 which provide the "very low" limits established by the U.S. Department of Housing and Urban Development (HUD) are the state limits for those income categories and State of California Redevelopment Agency Law. The final affordable rents established for the apartment units shall not exceed the maximum allowable rents for "very low" households as defined in the above code sections. Said rents shall be approved for consistency with the definitions by the Housing Division staff. (P)

35. MECHANICAL EQUIPMENT: All mechanical equipment, ground transformers and meters shall be located and screened to minimize visual impacts. (P)
36. ROOFTOP EQUIPMENT: Rooftop mechanical equipment shall be concealed from street level views through roof design that is architecturally integrated with the building, such as equipment wells and parapets. (P)
37. STORMWATER: Implement standard best management practices (BMPs) for the control of erosion during the temporary stockpiling of excavated soils with fiber rolls and installing sand or gravel bags to minimize runoff impacts to halt runoff from entering the storm drainage system. (P)
38. STORMWATER: During all construction activities onsite, the project applicant/developer shall adhere to the following Best Management Practices as suggested by the Bay Area Air Quality Management Board:
- a. Watering all active construction areas twice daily and more often during windy periods. Active areas adjacent to existing land uses shall be kept damp at all times, or shall be treated with non-toxic stabilizers or dust palliatives;
  - b. Cover all trucks hauling soil, sand and other loose materials or require all trucks to maintain at least a 2-foot freeboard level within their truckbeds;
  - c. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites;
  - d. Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites;
  - e. Sweep streets daily with water sweeper if visible soil material is carried onto adjacent public streets;
  - f. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more);
  - g. Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);
  - h. Limit traffic speeds on unpaved areas to 15 mph;
  - i. Install sandbags or other erosion control measures to prevent silt runoff to public roadways;
  - j. Plant vegetation in disturbed areas as quickly as possible; and
  - k. Suspend excavation and grading (all earthmoving or other dust-producing activities) or equipment during periods of high winds when watering cannot eliminate visible dust plumes. (P)
39. TRASH MAINTENANCE: The trash bins, compactors and trash/recycling enclosure areas shall be kept clean by double-bagging garbage and by frequent sweeping and disposal of any spilled solid waste. Refuse and recycling containers shall not be visible from a public or private street. Such containers shall be stored either within the parking facility of the building or within a vehicular accessway. (P)

40. TRASH ENCLOSURE: Trash enclosure walls shall incorporate building materials and colors that match the architecture of the building, and be well landscaped. (P)
41. UTILITIES: Public utility distribution meters, vaults and similar installations shall be consolidated in a single area whenever possible and located away from highly visible areas such as street corners and public open spaces. (P)
42. STREET NAMES: Prior to Final Map Approval, the applicant shall submit a "City Streets, Parks, and Facilities Naming Suggestion Form" to staff. Recommendations shall be brought to the Facilities Naming Subcommittee first for new developments and the Subcommittee shall make recommendations to the City Council for naming City streets. (P)
43. ADDRESSES: Prior to building permit issuance, the applicant shall submit a request for new addresses to be assigned to the development. (P)

#### ENGINEERING DEPT SPECIAL CONDITIONS

44. The issuance of building permits to implement this land use development will be suspended if necessary to stay within (1) available water supplies, or (2) the safe or allocated capacity at the San Jose/Santa Clara Water Pollution Control Plant, and will remain suspended until water and sewage capacity are available. No vested right to the issuance of a Building Permit is acquired by the approval of this land development. The foregoing provisions are a material (demand/supply) condition to this approval. (E)
45. Prior to issuance of any building permits, developer shall obtain approval from the City Engineer of the water, sewer, and storm drain studies for this development. These studies shall identify the development's effect on the City's present Master Plans and the impact of this development on the trunk lines. If the results of the study indicate that this development contributes to the over-capacity of the trunk line, it is anticipated that the developer will be required to mitigate the overflow or shortage by construction of a parallel line or pay a mitigation charge, if acceptable to the City Engineer. (E)
46. At the time of final map approval, the developer shall submit a grading plan and a drainage study prepared by a registered Civil Engineer. The drainage study shall analyze the existing and ultimate conditions and facilities. The study shall be reviewed and approved by the City Engineer and the developer shall satisfy the conclusions and recommendations of the approved drainage study prior to final map approval of the first phase of development. (E)
47. Prior to final map approval, the developer shall obtain design approval and bond for all necessary public improvements along Montague Expressway and Main Street, including but not limited to curb and gutter, pavement, sidewalk, signage and striping, bus stops and bus pads, signal installation at South Main Street and Project main entrance, median installation along Main Street, median and street decorative lighting, median landscaping, street lights, Street trees and tree wells, street furniture installation, fire hydrants, storm drain, sewer and water services. Plans for all public improvements shall be prepared on Mylar (24"x36"

sheets) with City Standard Title Block and submit a digital format of the Record Drawings (AutoCAD format is preferred) upon completion of improvements. The developer shall also execute a secured public improvement agreement. The agreement shall be secured for an amount of 100% of the engineer's estimate of the construction cost for faithful performance and 100% of the engineer's estimate of the construction cost for labor & materials. The locations of public facilities such as water meters, RP backflow preventers, sewer clean outs, etc. shall be placed so access is maintained and kept clear of traffic. *All improvements along Main street frontage must be in accordance with the 2007 South Main Street & South Abel Street Plan Line Study, and all public improvements shall be constructed and accepted by the City prior to building occupancy permit issuance of the first production unit.* (E)

48. Prior to final map approval, the developer shall acquire from Santa Clara County that piece of property fronting Montague Expressway currently being used as in-only access from Montague. (E)
49. Prior to any building permit issuance developer shall submit an executed petition to annex the subject property into the CFD 2005-1, with respect to the property, the special taxes levied by Community Facility District (CFD 2005-1) for the purpose of maintaining the public services. The petition to annex into the CFD shall be finalized concurrently with the final map recordation or prior to any building permit issuance, whichever occurs first. The developer shall comply with all rules, regulations, policies and practices established by the State Law and/or by the City with respect to the CFD including, without limitation, requirements for notice and disclosure to future owners and/or residents. (E)
50. The tentative map shall show the proposed phasing diagram of multiple final maps. (E)
51. The tentative map and all final maps shall designate all common lots and easements as lettered lots or lettered easements. (E)
52. Drainage facilities outletting sump conditions shall be designed to convey the flows and protect all buildings. (E)
53. Prior to final map approval, the developer shall establish a homeowner association. The homeowner association shall be responsible for the maintenance of the landscaping, walls, private street lights, common area and private streets and shall have assessment power. This information shall be clearly included in the Conditions, Covenants, and Restrictions (CC&R) and recorded documents. The CC&R document shall be submitted for review and approval by the City Engineer. (E)
54. Prior to final map approval submit a report from a structural and soil engineer stating the condition of the existing wall and its remaining useful life. The CC&R document shall state the maintenance responsibility of the wall maintenance. At Planning Director's option, the developer may be required to reconstruct the existing wall. (E)

55. In accordance with Milpitas Municipal Code XI-1-7.02-2, the developer shall underground all existing wires and remove the related poles within the proposed subdivision, with the exception of transmission lines supported by metal poles carrying voltages of 37.5KV or more do not have to be undergrounded. All proposed utilities within the subdivision shall also be undergrounded. (E)
56. Prior to recordation of any final map, the developer shall submit to the City a digital format of the final map (AutoCAD format). All final maps shall be tied to the North America Datum of 1983 (NAD 83), California Coordinate of 1983, zone 3. (E)
57. The final map shall be recorded prior to issuance of any building permit. (E)
58. The developer shall dedicate on the final map necessary easements for public service utilities, water, and sanitary sewer purposes. (E)
59. The developer shall not obstruct the noted sight distance areas as indicated on the City standard drawing #405. Overall cumulative height of the grading, landscaping & signs as determined by sight distance shall not exceed 2 feet when measured from street elevation. (E)
60. Prior to occupancy permit issuance developer shall construct solid waste enclosures to house the necessary compactors. The enclosure shall be designed per the Development Guidelines for Solid Waste Services. City review/approval is required prior to construction of the trash enclosure. (E)
61. Per Chapter 200, Solid Waste Management, V-200-3.10, General Requirement, applicant / property owner or HOA shall not keep or accumulate, or permit to be kept or accumulated, any solid waste of any kind and is responsible for proper keeping, accumulating and delivery of solid waste. In addition, according to V-200-3.20 Owner or HOA Responsible for Solid Waste, Recyclables, and Yard Waste, shall subscribe to and pay for solid waste services rendered. Prior to occupancy permit issuance (start of operation), the applicant shall submit evidence to the City that a minimum level of refuse service has been secured using a Service Agreement with Allied Waste Services (formally BFI) for commercial services to maintain an adequate level of service for trash and recycling collection. After the applicant has started its business, the applicant shall contact Allied Waste Services commercial representative to review the adequacy of the solid waste level of services. If services are determined to be inadequate, the applicant shall increase the service to the level determined by the evaluation. For general information, contact BFI at (408) 432-1234. (E)
62. Per Chapter 200, Title V of Milpitas Municipal Code (Ord. No. 48.7) solid waste enclosures shall be designed to limit the accidental discharge of any material to the storm drain system. The storm drain inlets shall be located away from the trash enclosures (a minimum of 25 feet). This is intended to prevent the discharge of pollutants from entering the storm drain system, and help with compliance with the City's existing National Pollution Discharge Elimination System (NPDES) Municipal permit. (E)

63. The U.S. Environmental Protection Agency (EPA) has empowered the San Francisco Bay Regional Water Quality Control Board (RWQCB) to administer the National Pollution Elimination Discharge System (NPDES) permit. The NPDES permit requires all dischargers to eliminate as much as possible pollutants entering our receiving waters. Construction activities which disturb 1 acres or greater are viewed as a source of pollution, and the RWQCB requires a Notice of Intent (NOI) be filed, along with obtaining an NPDES Construction Permit prior to the start of construction. A Storm Water Pollution Prevention Plan (SWPPP) and a site monitoring plan must also be developed by the applicant, and approved by the City prior to permit issuance for site clearance or grading. Contact the RWQCB for questions regarding your specific requirements at (800) 794-2482. For general information, contact the City of Milpitas at (408) 586-3329. (E)
64. The developer shall comply with Regional Water Quality Control Board's C.3 requirements and implement the following:
- A. At the time of building permit plan check submittal, the developer shall submit a "final" Stormwater Control Plan and Report. Site grading, drainage, landscaping and building plans shall be consistent with the approved Stormwater Control Plan. The Plan and Report shall be prepared by a licensed Civil Engineer and certified that measures specified in the report meet the C.3 requirements of the Regional Water Quality Control Board (RWQCB) Order, and shall be implemented as part of the site improvements.
  - B. Prior to building permit issuance, the developer shall submit an Operation and Maintenance (O&M) Plan for the long-term operation and maintenance of C-3 treatment facilities.
  - C. Prior to Final occupancy, the developer shall execute and record an O&M Agreement with the City for the operation, maintenance and annual inspection of the C.3 treatment facilities. (E)
65. Prior to building site improvement or landscape permit issuance, the building permit application shall be consistent with the applicant's approved Stormwater Control Plan and approved special conditions, and shall include drawings and specifications necessary to implement all measures described in the approved Plan. As may be required by the City's Building, Planning or Engineering Divisions, drawings submitted with the permit application (including structural, mechanical, architectural, grading, drainage, site, landscape and other drawings) shall show the details and methods of construction for site design features, measures to limit directly connected impervious area, pervious pavements, self-retaining areas, treatment BMPs, permanent source control BMPs, and other features that control stormwater flow and potential stormwater pollutants. Any changes to the approved Stormwater Control Plan shall require Site & Architectural ("S" Zone) Amendment application review. (E)
66. Prior to issuance of Certificate of Occupancy, the applicant shall submit a Stormwater Control Operation and Maintenance (O&M) Plan, acceptable to the City, describing operation and maintenance procedures needed to insure that treatment BMPs and other stormwater control measures continue to work as intended and do not create a nuisance



(including vector control). The treatment BMPs shall be maintained for the life of the project. The stormwater control operation and maintenance plan shall include the applicant's signed statement accepting responsibility for maintenance until the responsibility is legally transferred. (E)

67. All existing public utilities shall be protected in place and if necessary relocated as approved by the City Engineer. No permanent structure is permitted within City easements and no trees or deep rooted shrub are permitted within City utility easements, where the easement is located within landscape areas. (E)
68. Prior to any work within public right of way or City easement, the developer shall obtain an encroachment permit from City of Milpitas Engineering Division. (E)
69. The developer shall call Underground Service Alert (U.S.A.) at (800) 642-2444, 48 hrs prior to construction for location of utilities. (E)
70. Access rights and improvements along Montague Expressway are under the jurisdiction of Santa Clara County Roads and Airports Department. Prior to building permit issuance the developer shall:
  - A. Submit improvement plans for all the works, including the landscaping, along Montague Expressway and have the improvement plans reviewed and approved by the Santa Clara County Roads and Airports Department.
  - B. Obtain any necessary permits from Santa Clara County Roads and Airports Department prior to start of any work along Montague Expressway.
  - C. Enter into a landscape maintenance agreement with the County of Santa Clara to maintain the proposed temporary landscaping improvement along Montague Expressway. (E)
71. It is the responsibility of the developer to obtain any necessary encroachment permits and approvals from affected agencies or private parties, including but not limited to, Pacific Gas and Electric, SBC, Comcast, and Santa Clara County Road & Airport Department. Copies of these approvals or permits must be submitted to the City of Milpitas Engineering Division. (E)
72. The developer shall submit the following items with the building permit application and pay the related fees prior to final inspection (occupancy) by the Building Division:
  - A. Storm water connection fee of **\$188,372**, based on 11.232 acres @ \$16,771 per acre. The water, sewer and treatment plant fees will be calculated at the time building plan check submittal.
  - B. Water Service Agreement(s) for water meter(s) and detector check(s).
  - C. Sewer Needs Questionnaire and/or Industrial Waste Questionnaire. Contact the Land Development Section of the Engineering Division at (408) 586-3329 to obtain the form(s). (E)
73. Prior to building permit issuance, the developer shall pay its fair share cost of purchasing adequate public system sewage capacity for the development. Fees shall consist of treatment plant fees up to the Master Plan level and connection fees. Impact fees for discharges above

master plan levels for sewage collection system infrastructure improvements, and regional plant capacity needs (above the master plan capacities), as determined by the City Engineer. This amount is estimated to be **\$665,712**, as of October 2006, to be adjusted by ENR at the time of payment. This impact fee is in addition to the City existing connection fee and treatment plant fee. (E)

74. Prior to any building permit issuance, the developer shall provide for adequate sewage pumping capacity at the Milpitas Main Sewage Pump Station for the respective developments. The developer can fulfill this obligation by payment of **\$202,377** to the City for this purpose. This amount is as of October 2006, and to be adjusted by ENR at the time of payment. This impact fee is in addition to the City existing connection fee and treatment plant fee. (E)
75. Prior to building permit issuance; the developer shall pay its fair share cost of purchasing adequate public system water for the respective developments, including costs for capacity and storage needs above master plan capacities, as determined by the City Engineer. This amount is estimated to be **\$158,500**, as of October 2006, to be adjusted by ENR at the time of payment. This impact fee is in addition to the City existing connection fee and treatment plant fee. (E)
76. Prior to building permit issuance, the applicant shall contribute a “fair share” traffic impact fee in the amount of **\$302,977** (based on a Midtown impact fee of \$113 per peak hour trip, assuming 164 trips and Montague Expressway impact fee of \$903 per peak hour trip, assuming 315 trips). (E)
77. Prior to final map approval, the developer shall obtain design approval and bond for the South Main Street median improvement. The subject improvements shall be constructed and accepted by the City prior to building occupancy permit issuance of the first production unit, in lieu of South Main Street Median Island contribution fee. (E)
78. Prior to building permit issuance, developer must pay all applicable development fees, including but not limited to, sewer, storm and water connection fees, sewer treatment plant fees, plan check and inspection deposit, and 2.5% building permit automation fee. (E)
79. If necessary, developer shall obtain required industrial wastewater discharge approvals from San Jose/Santa Clara Water Pollution Control Plant (WPCP) by calling WPCP at (408) 942-3233. (E)
80. Multistory buildings as proposed require water supply pressures above that which the city can normally supply. Additional evaluations by the applicant are required to assure proper water supply (potable or fire services). The Applicant shall submit an engineering report detailing how adequate water supply pressures will be maintained. Contact the Utility Engineer at 586-3345 for further information. (E)
81. In accordance with Chapter 5, Title VIII (Ord. 238) of Milpitas Municipal Code, for new and/or rehabilitated landscaping 2500 square feet or larger the developer shall:
  - A. Provide separate water meters for domestic water service & irrigation service. Developer is also encouraged to provide separate domestic meters for each tenant.

- B. Comply with all requirements of the City of Milpitas Water Efficient Ordinance (Ord No 238). Two sets of landscape documentation package shall be submitted by the developer or the landscape architect to the Building Division with the building permit plan check package. Approval from the Land Development Section of the Engineering Division is required prior to building permit issuance, and submittal of the Certificate of Substantial Completion is required prior to final occupancy inspection.

Contact the Land Development Section of the Engineering Division at (408) 586-3329 for information on the submittal requirements and approval process. (E)

82. Per Chapter 6, Title VIII of Milpitas Municipal Code (Ord. No. 240), the landscape irrigation system must be designed to meet the City's recycled water guidelines and connect to recycled water system **when available**. The developer is encouraged to design the entire landscaped area for recycled water connection. If the site is not properly designed for recycled water at this time, the entire site will be required to retrofit when recycled water becomes available. Contact the Land Development Section of the Engineering Division at (408) 586-3329 for design standards to be employed. (E)

83. Per Milpitas Municipal Code Chapter 2, Title X (Ord. No. 201), developer may be required to obtain a permit for removal of any existing tree(s). Contact the Street Landscaping Section at (408) 586-2601 to obtain the requirements and forms. (E)

84. The developer shall obtain information from the US Postal Services regarding required mailboxes. Structures to protect mailboxes may require Building, Engineering and Planning Divisions review. (E)

85. All utilities shall be properly disconnected before the existing building can be demolished. Show/state how the water service(s), sewer service(s) and storm service(s) will be disconnected. The water service shall be locked off in the meter box and disconnected or capped immediately behind the water meter for future use, if it is not to be used during the construction. If the existing water services will not be used for the proposed development, the service laterals shall be removed and capped at the main water line. The sanitary sewer shall be capped off at the clean out near the property line or approved location if it is not to be used. The storm drain shall be capped off at a manhole or inlet structure or approved location if it is not to be used. (E)

86. The Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency (FEMA) under the National Flood Insurance Program shows this site to be in Flood Zone "X". (E)

87. At the time of building plan check submittal, the developer shall address and incorporate the changes shown on Engineering Services Exhibit "T", dated 3/30/2007. (E)

#### FIRE DEPARTMENT SPECIAL CONDITIONS

88. Prior to Final Map Approval, the Developer shall ensure that all private streets and associated public streets comply with Fire Department ladder truck access and turning requirements. (F)

*PAGE 32 OF 32*

*P.C. ARS—April 11, 2007*

*GM2006-1, ZC2006-1, SZ2006-5, MA2006-2 & EA2006-4—Estrella by Warmington Homes*

**Planning Division = (P)**

**Engineering Division = (E)**

**Fire Department = (F)**

## **RESOLUTION NO. 501**

### **A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MILPITAS RECOMMENDING APPROVAL OF GENERAL PLAN AND MIDTOWN SPECIFIC PLAN AMENDMENT NO. GM2006-1 TO DESIGNATE APPROXIMATELY 11.17 ACRES LOCATED AT 1601 SOUTH MAIN STREET AS MULTI-FAMILY, VERY HIGH DENSITY**

**WHEREAS**, the project applicant, Warmington Homes, has initiated this General Plan and Midtown Specific Plan amendment to redesignate the property located at 1601 South Main Street in the City of Milpitas, State of California, as further depicted in the maps contained in Exhibit A ("Property"), from Industrial Park to Multi-Family, Very High Density; and

**WHEREAS**, this General Plan and Midtown Specific Plan amendment is accompanied by a proposal to change the Zoning District (ZC2006-1) for the Property to Multi-Family, Very High Density with "S" Zone Overlay District "R4-S"; and

**WHEREAS**, pursuant to and in accordance with the provisions of the California Environmental Quality Act, California Public Resources Code §§ 21000, et seq. (CEQA), an Environmental Impact Report (EIR) was prepared, properly circulated for public review, and certified by the City Council (Midtown Specific Plan EIR, SCH # 2000092027); and

**WHEREAS**, in accordance with the provisions of CEQA, a Supplemental Environmental Impact Report (SEIR) was prepared for this project and properly circulated for public review (EA2006-4), in which it was determined that while most impacts could be reduced to a level of less than significant through incorporation of project requirements and mitigation measures, certain traffic and air quality impacts would remain significant and unavoidable, even after mitigation (Estrella SEIR, SCH # 2006062054); and

**WHEREAS**, by separate resolution, the Planning Commission recommends certification of the SEIR, including a Statement of Overriding Considerations for those impacts found to be significant and unavoidable; and

**WHEREAS**, in accordance with Milpitas Municipal Code section XI-10-54.17-6, and based on the entirety of the record, the Planning Commission finds that school availability is not unreasonably burdened by the project because there is no substantial lack of school availability to serve this project, and further that the applicant has agreed to pay a school impact fee pursuant and according to section XI-10-54.17 of the Milpitas Municipal Code; and

**WHEREAS**, the Planning Commission held a properly noticed public hearing on April 11, 2007 to consider General Plan Amendment and Midtown Specific Plan Amendment No. GM2006-1; and

**WHEREAS**, all documents and other materials constituting the record for this matter, upon which the City's decision and its findings are based, are located at the Planning Division of the City of Milpitas, 455 East Calaveras Blvd., Milpitas, CA 95035.

**NOW, THEREFORE, BE IT RESOLVED** that the foregoing recitals are true and correct and made a part of this Resolution.

**BE IT FURTHER RESOLVED** that the Planning Commission does hereby find that approval of GM2006-1 is in the public interest and that the General Plan so amended will remain internally consistent.

**BE IT FURTHER RESOLVED** that based on the entirety of the record, which includes without limitation, the Milpitas General Plan, the Midtown Specific Plan, the application and supporting documentation for the General Plan and Specific Plan amendment, the previously certified EIR and recently prepared SEIR, the Planning Commission meeting of April 11, 2007, including all staff reports, consultant reports, documents and minutes prepared in connection thereto, the Planning Commission does hereby recommend to the City Council approval of the General Plan Amendment and Midtown Specific Plan Amendment (GM2006-1) to redesignate 1601 South Main Street from Industrial Park to a Multi-Family, Very High Density designation.

**PASSED, APPROVED, AND ADOPTED** this \_\_\_\_ of April 2007, by the following vote:

**AYES:**

**NOES:**

**ABSENT:**

**ABSTAIN:**

**ATTEST:**



---

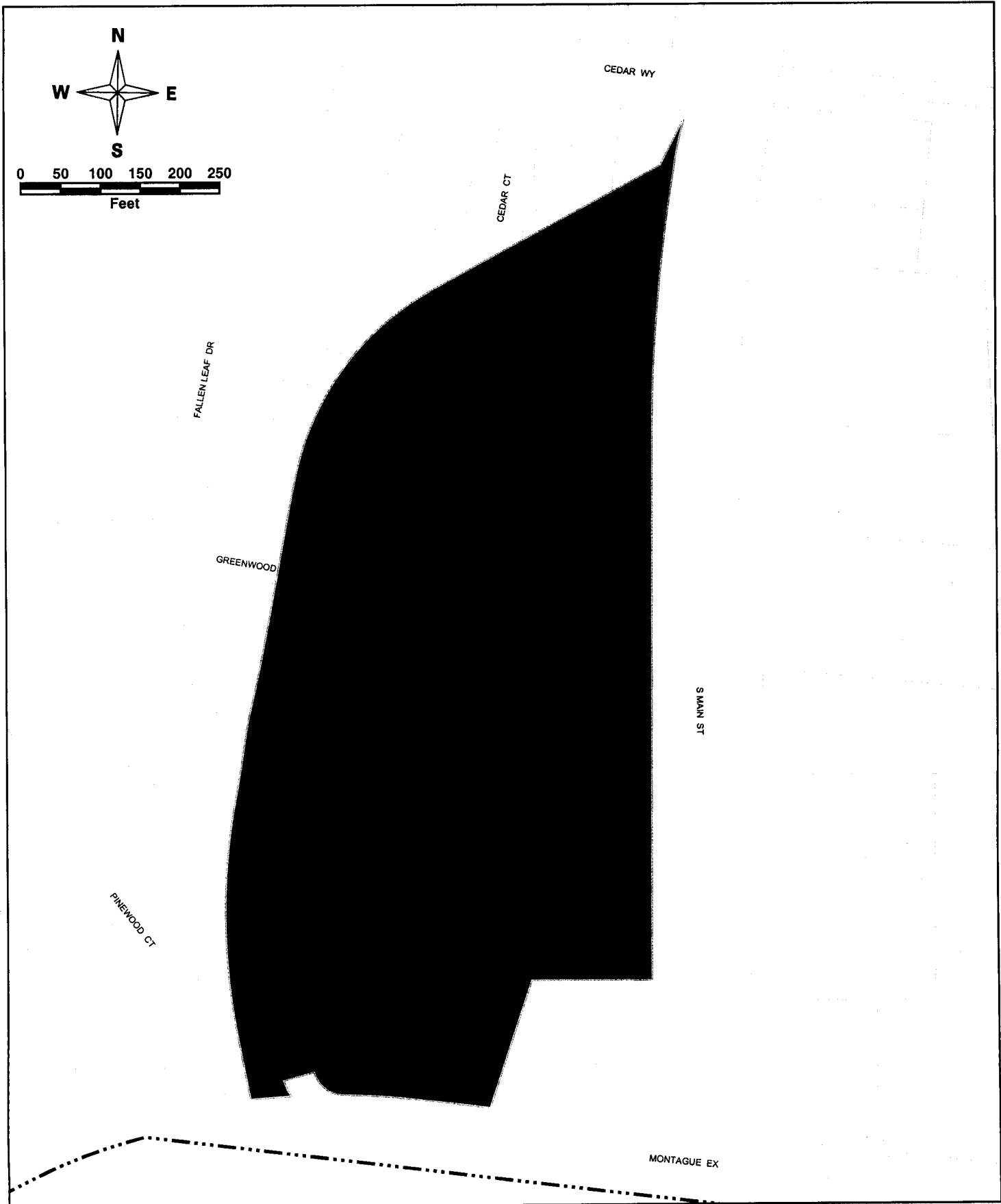
Felix Reliford  
Secretary to the Planning Commission  
City of Milpitas



City of Milpitas  
General Plan Amendment  
Planning Commission Resolution No. 501  
Exhibit A  
April 2007

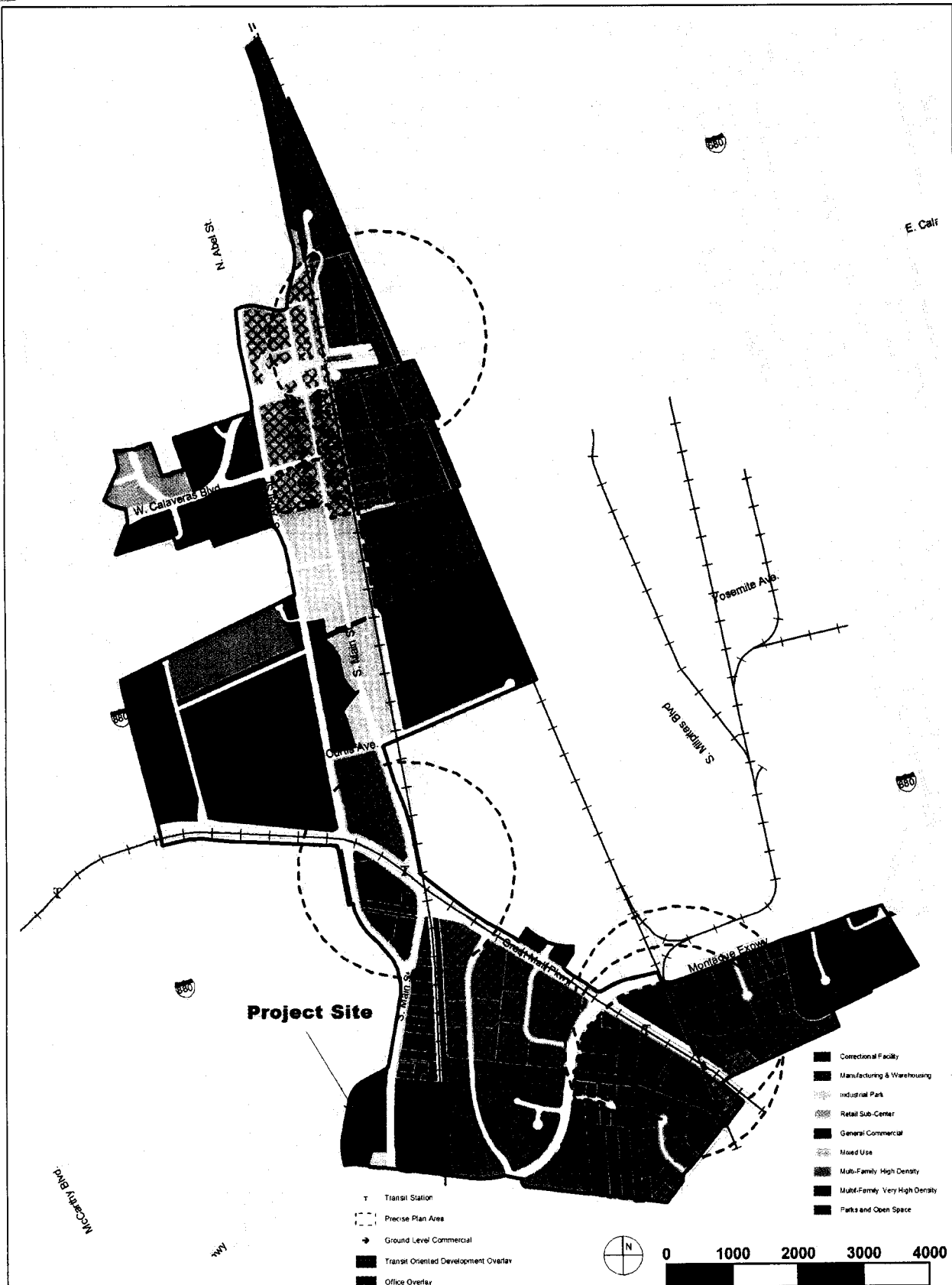
Legend

-  R4 - Multi-Family Residential, Very High Density (31-40 units/gross acre)
-  City Boundary





City of Milpitas  
Milpitas Midtown Specific Plan Map Change  
Planning Commission Resolution No. 501  
Exhibit B  
April 2007



Application No. GM2006-1, ZC2006-1, SZ2006-5, MA2006-2, and EA2006-4

Map prepared by the GIS Staff of the City of Milpitas



## **RESOLUTION NO. 502**

### **A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MILPITAS RECOMMENDING TO THE CITY COUNCIL A CHANGE BY ORDINANCE TO THE CITY'S ZONING MAP TO REFLECT THE REZONE OF APPROXIMATELY 11.17 ACRES LOCATED AT 1601 SOUTH MAIN STREET FROM INDUSTRIAL PARK WITH "S" ZONE OVERLAY DISTRICT "MP-S" TO MULTI-FAMILY, VERY HIGH DENSITY WITH "S" ZONE OVERLAY DISTRICT "R4-S"**

**WHEREAS**, the project applicant, Warmington Homes, has initiated a Zoning Change (ZC2006-1) to rezone the property located at 1601 South Main Street in the City of Milpitas, State of California, as further depicted in the maps contained in Exhibit A ("Property"), from Industrial Park with "S" Zone Overlay District "MP-S" to Multi-Family, Very High Density with "S" Zone Overlay District "R4-S"; and

**WHEREAS**, this Zoning Change is accompanied by a proposal to amend the General Plan and Midtown Specific Plan (GM2006-1) to redesignate the Property to Multi-Family, Very High Density with "S" Zone Overlay District "R4-S"; and

**WHEREAS**, pursuant to and in accordance with the provisions of the California Environmental Quality Act, California Public Resources Code §§ 21000, et seq. (CEQA), an Environmental Impact Report (EIR) was prepared, properly circulated for public review, and certified by the City Council (Midtown Specific Plan EIR, SCH # 2000092027); and

**WHEREAS**, in accordance with the provisions of CEQA, a Supplemental Environmental Impact Report (SEIR) was prepared for this project and properly circulated for public review (EA2006-4), in which it was determined that while most impacts could be reduced to a level of less than significant through incorporation of project requirements and mitigation measures, certain traffic and air quality impacts would remain significant and unavoidable, even after mitigation (Estrella SEIR, SCH # 2006062054); and

**WHEREAS**, by separate resolution, the Planning Commission recommends certification of the SEIR, including a Statement of Overriding Considerations for those impacts found to be significant and unavoidable; and

**WHEREAS**, the Planning Commission held a properly noticed public hearing on April 11, 2007 to consider Zoning Change No. ZC2006-1; and

**WHEREAS**, all documents and other materials constituting the record for this matter, upon which the City's decision and its findings are based, are located at the Planning Division of the City of Milpitas, 455 East Calaveras Blvd., Milpitas, CA 95035.

**NOW, THEREFORE, BE IT RESOLVED** that the foregoing recitals are true and correct and made a part of this Resolution.

**BE IT FURTHER RESOLVED** that the Planning Commission does hereby find that approval of ZC2006-1 is in the public interest and that the Zoning Ordinance so amended, and General Plan will remain internally consistent.

**BE IT FURTHER RESOLVED** that based on the entirety of the record, which includes without limitation, the Milpitas General Plan, the Midtown Specific Plan, the application and supporting documentation for the General Plan and Specific Plan amendment, the previously certified EIR and recently prepared SEIR, the Planning Commission meeting of April 11, 2007, including all staff reports, consultant reports, correspondence, documents and minutes prepared in connection thereto, the Planning Commission does hereby recommend to the City Council approval of the Zoning Change (ZC2006-1) by ordinance to rezone 1601 South Main Street from Industrial Park with "S" Zone Overlay District "MP-S" to Multi-Family, Very High Density with "S" Zone Overlay District "R4-S".

**PASSED, APPROVED, AND ADOPTED** this \_\_\_\_ of April 2007, by the following vote:

**AYES:**

**NOES:**

**ABSENT:**

**ABSTAIN:**

**ATTEST:**

---

Felix Reliford  
Secretary to the Planning Commission  
City of Milpitas



City of Milpitas  
New Zoning Designation  
Sectional District Map  
Planning Commission Resolution No. 502  
Exhibit C  
April 2007

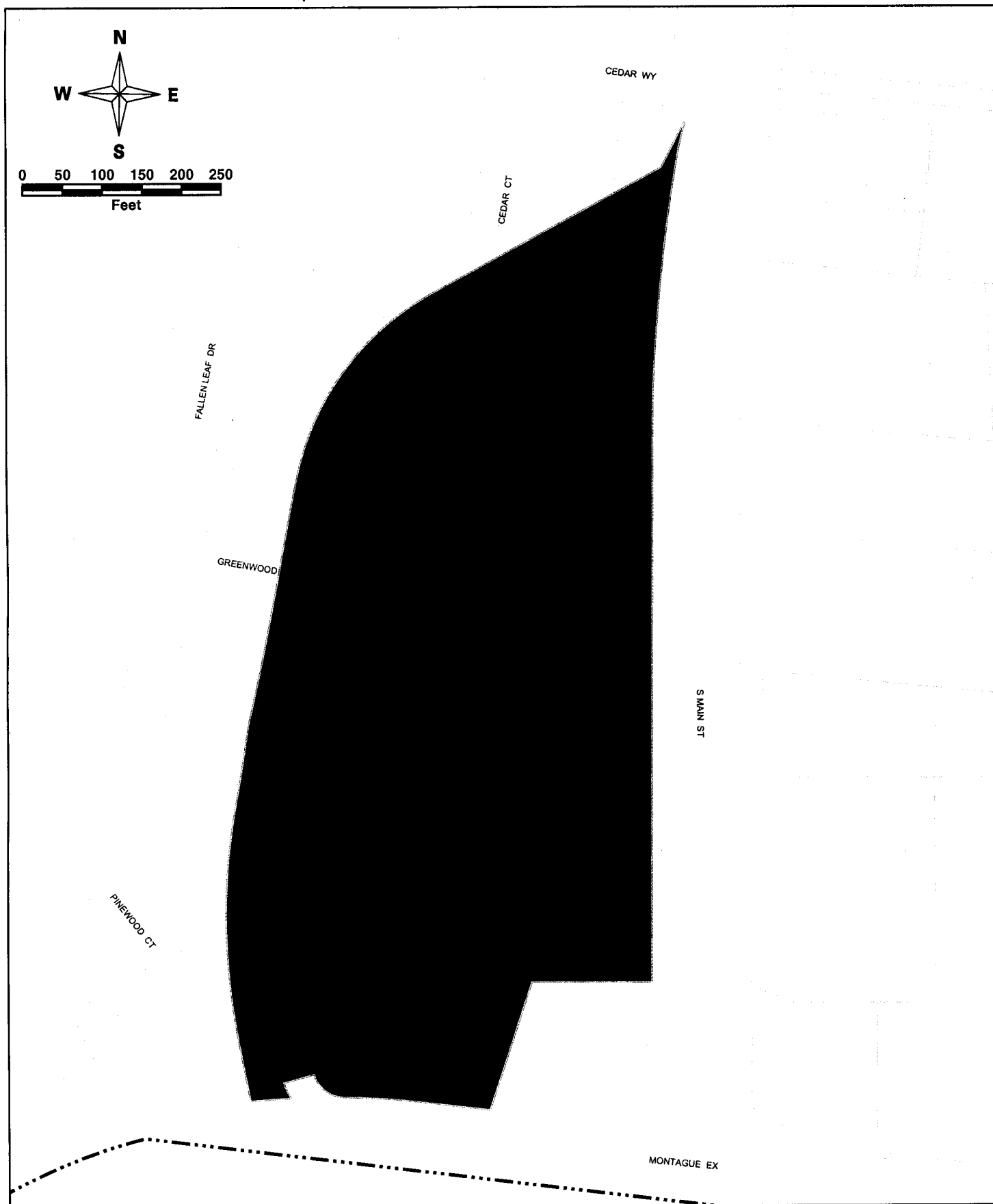
Legend



R4 - Multi-Family Residential, Very High Density  
(31-40 units/gross acre)



City Boundary



**RESOLUTION NO. 503**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF  
MILPITAS RECOMMENDING THE MILPITAS CITY COUNCIL CERTIFY  
THE SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT (EA2006-4)  
FOR THE ESTRELLA PROJECT LOCATED AT 1601 SOUTH MAIN STREET  
IN THE CITY OF MILPITAS**

**WHEREAS**, the project applicant, Warmington Homes, has requested a General Plan and Midtown Specific Plan amendment and zoning map change to redesignate and rezone the property located at 1601 South Main Street in the City of Milpitas, State of California, as further depicted in the maps contained in Exhibit E ("Property"), from Industrial Park to Multi-Family, Very High Density, with "S" Zone Overlay District "R4-S"; and

**WHEREAS**, pursuant to and in accordance with the provisions of the California Environmental Quality Act, California Public Resources Code §§ 21000, et seq. (CEQA), an Environmental Impact Report (EIR) was prepared, properly circulated for public review, and certified by the City Council (Midtown Specific Plan EIR, SCH # 2000092027); and

**WHEREAS**, in accordance with the provisions of CEQA, a Draft Supplemental Environmental Impact Report (DSEIR) was prepared for this project and properly circulated for public review; and

**WHEREAS**, the City prepared responses to comments on environmental issues received during the public review period, which responses clarify, amplify, and make minor corrections to the information contained in the DSEIR, providing good faith, reasoned analysis supported by substantial factual information; and

**WHEREAS**, a Final SEIR (FSEIR), attached to this Resolution as Exhibit D and incorporated herein by reference, was published in March, 2007, which incorporates the DSEIR, comments received on the DSEIR, and the City's responses to those comments (Estrella SEIR, SCH # 2006062054); and

**WHEREAS**, the FSEIR concludes that while most impacts could be reduced to a level of less than significant through incorporation of project requirements and mitigation measures, certain traffic and air quality impacts would remain significant and unavoidable, even after mitigation; and

**WHEREAS**, a Statement of Overriding Considerations was prepared for those impacts found to be significant and unavoidable; and

**WHEREAS**, the Planning Commission held a properly noticed public hearing on April 11, 2007 to consider the FSEIR, as well as accompanying findings on significant

impacts, mitigation measures, project alternatives, and a Statement of Overriding Considerations; and

**WHEREAS**, the findings determinations, and recommendations contained herein constitute the independent judgment and analysis of the Planning Commission and are supported by substantial evidence in the record, which includes without limitation, the Milpitas General Plan, the Midtown Specific Plan, the application and supporting documentation for the General Plan and Specific Plan amendment, the previously certified EIR and recently prepared SEIR, the Planning Commission meeting of April 11, 2007, including all staff reports, consultant reports, correspondence, documents and minutes prepared in connection thereto; and,

**WHEREAS**, all documents and other materials constituting the record for this matter, upon which the City's decision and its findings are based, are located at the Planning Division of the City of Milpitas, 455 East Calaveras Blvd., Milpitas, CA 95035.

**NOW, THEREFORE, BE IT RESOLVED** that the foregoing recitals are true and correct and made a part of this Resolution.

**BE IT FURTHER RESOLVED** that as required by CEQA, and based on the entirety of the record, which includes without limitation, the Milpitas General Plan, the Midtown Specific Plan, the application and supporting documentation for the General Plan and Specific Plan amendment, the previously certified EIR and recently prepared SEIR, the Planning Commission meeting of April 11, 2007, including all staff reports, consultant reports, correspondence, documents and minutes prepared in connection thereto, the Planning Commission does hereby recommend as follows:

1. That the City Council finds that the FSEIR for the project, dated March, 2007, was completed in compliance with CEQA, and consists of and incorporates the DSEIR;
2. That the City Council find that the FSEIR was presented to the City Council and that the City Council reviewed and considered the information contained in the FSEIR prior to taking action on this matter;
3. That as required by CEQA, and based on substantial evidence in the record, the City Council adopt the findings regarding significant impacts and mitigation measures, as further detailed in Exhibit A to this Resolution, and incorporated herein by reference;
4. That as required by CEQA, and based on substantial evidence in the record, the City Council adopt findings regarding project alternatives, as further detailed in Exhibit B to this Resolution, and incorporated herein by reference;

5. That for those impacts identified as significant and unavoidable, the City Council adopt a Statement of Overriding Considerations for the project, as further detailed in Exhibit C to this Resolution, and incorporated herein by reference.

**BE IT FURTHER RESOLVED** that based on the foregoing, the Planning Commission of the City of Milpitas does hereby recommend that the City Council certify the Final Supplemental Environmental Impact Report for this project (EA2006-4).

**PASSED, APPROVED, AND ADOPTED** this \_\_\_\_ of April 2007, by the following vote:

**AYES:**

**NOES:**

**ABSENT:**

**ABSTAIN:**

**ATTEST:**

---

Felix Reliford  
Secretary to the Planning Commission  
City of Milpitas

## **EXHIBIT A**

### **Findings Regarding Significant Impacts and Mitigation Measures**

Pursuant to Public Resources Code Section 21081 and CEQA Guidelines Sections 15091 and 15163(a), the City Council of the City of Milpitas makes the following findings with respect to the potential for significant supplemental environmental impacts from the future development of Estrella Project within the Midtown Specific Plan area and means for mitigating those supplemental impacts. The text of the Draft Supplemental Environmental Impact (DSEIR) and Final Supplemental Impact Report (FSEIR) should be consulted for a complete description of supplemental impacts and mitigation measures. Findings pursuant to Section 21081(c) relating to Project alternatives are contained in Exhibit B.

**Supplemental Impact UTL-1: Water supply.** The proposed project would require additional sources of domestic water not presently anticipated in the City's Water Master Plan. DSEIR p.29.

Mitigation: The project developer shall purchase additional water supplies to support the proposed development, including costs of capacity and storage needs above Water Master Plan capacities, as determined by the City.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale: The Project developer is required to secure additional potable water supplies to accommodate the additional demand placed on the City's water supply, including ensuring that the City maintains adequate water storage capacity.

**Supplemental Impact UTL-2: Wastewater treatment and sewage pumping capacity.** The proposed project could exceed wastewater treatment capacity not presently anticipated in the City's Water Master Plan and exceed the pumping capacity of the City's Main sewer pump station. DSEIR p. 30.

Mitigation: The developer shall purchase adequate public system wastewater treatment capacity to serve the proposed project, as well as fair share fees to replace or upgrade the Main sewer pump station, as determined by the City. The project developer shall provide the City of Milpitas with documentary evidence that adequate facilities for wastewater treatment and collection are available to serve the project prior to planning permit approval.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

**Rationale:** The Project developer will be responsible for providing adequate wastewater treatment and disposal capacity to accommodate the additional wastewater demand resulting from the Project.

**Supplemental Impact PARK-1: Provision of public parks.** The proposed project should provide approximately 3.62 acres of public parkland based on the standard of 3.5 acres of parks per 1,000 residents established in the Midtown Specific Plan, which would be reduced based on credit for on-site facilities as allowed by the City of Milpitas Parks Department. DSEIR p.33.

**Mitigation:** The Project developer shall pay park dedication in-lieu fees to the City of Milpitas for the required on-site dedication of public parks

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

**Rationale:** The Project developer has provided on-site park and recreation facilities that meet City park dedication requirements.

**Supplemental Impact TRA-1: Future roadway segment impacts.** In the year 2030, traffic generated by the proposed project along with other buildout traffic, would cause the roadway segments of Montague Expressway between South Main Street and I-880 (westbound) and South Main Street between Montague Expressway and South Abel Street (northbound and southbound) to exceed traffic thresholds of significance during the AM peak hour. This impact would include segments of Montague Expressway between McCarthy Boulevard and I-880 (eastbound) and South Main Street between South Abel Street to Montague Expressway (northbound and southbound) in the PM peak. DSEIR p.47.

**Mitigation:** The proposed project shall to pay a “fair share” fee toward the Montague Expressway Widening project for the roadway segment impacted along Montague Expressway and a “fair share” fee toward the Midtown Specific Plan for the South Main Street roadway segment

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR. However, even with mitigation, this impact will remain significant and unavoidable.

**Rationale for Finding:** Although payment of traffic impact fees will assist in funding regional transportation improvements, significant traffic impacts associated with the Project will remain until the anticipated roadway improvements can be constructed.

**Supplemental Impact AIR-1: Building demolition.** Demolition of existing structures on the site would generate fugitive particulate matter emissions that would temporarily affect local air quality. DSEIR p. 60.



Mitigation: The following dust control measures shall be included on demolition plans and specifications by contractors during demolition of existing structures:

- a) Watering should be used to control dust generation during demolition of structures and break-up of pavement.
- b) Cover all trucks hauling demolition debris from the site.
- c) Use dust-proof chutes to load debris into trucks whenever feasible. Watering should be used to control dust generation during transport and handling of recycled materials.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale: Utilization of dust control measures during Project construction as recommended by the Bay Area Air Quality Management District will ensure that minimal quantities of dust will be blown off of the site.

**Supplemental Impact AIR-2: Regional air emissions.** The project would result in a small increase in the regional emissions associated with development of the Midtown Specific Plan. The increase in emissions would be less than the BAAQMD significance thresholds, but the impacts of the Midtown EIR would be significant and unavoidable. DSEIR p. 61.

Mitigation: The BAAQMD has identified mitigation measures for reducing vehicle emissions from residential projects. Measures to assist in reducing vehicle and other emissions include:

- a) Consider providing a satellite telecommuting center within or near the proposed development.
- b) Provide secure and conveniently placed bicycle parking and storage facilities.
- c) Allow only natural gas fireplaces.
- d) Provide direct, safe, attractive pedestrian access from project land uses to transit stops and adjacent development.
- e) Utilize reflective (or high albedo) and emissive roofs and light colored construction materials to increase the reflectivity of roads, driveways, and other paved surfaces, and include shade trees near buildings to directly shield them from the sun's rays and reduce local air temperature and cooling energy demand.
- f) Provide physical improvements, such as sidewalk improvements (if needed), landscaping and bicycle parking that would act as incentives for pedestrian and bicycle modes of travel.

However, even with adherence to the above mitigations, impacts to regional air emissions as a result of approving and implementing the Project could not be reduced to a less-than-significant level and this impact would remain significant and unavoidable.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR. However, even with adherence to these measures, the Project's contribution to regional air emissions will remain significant and unavoidable.

Rationale: Adherence to the above mitigation will reduce the Project's contribution to regional air emissions will not be reduced to a less-than-significant level.

**Supplemental Impact AIR-3: Cumulative air emissions.** The project would result in a small increase in the regional emissions associated with development of the Midtown Specific Plan. The increase in emissions would be less than the BAAQMD significance thresholds, but the cumulative impacts of the Midtown Specific Plan would be significant and unavoidable. DSEIR p.62.

Mitigation: The BAAQMD has identified mitigation measures for reducing vehicle emissions from residential projects. Measures to assist in reducing vehicle and other emissions include:

- a) Consider providing a satellite telecommuting center within or near the proposed development.
- b) Provide secure and conveniently placed bicycle parking and storage facilities.
- g) Allow only natural gas fireplaces.
- h) Provide direct, safe, attractive pedestrian access from project land uses to transit stops and adjacent development.
- i) Utilize reflective (or high albedo) and emissive roofs and light colored construction materials to increase the reflectivity of roads, driveways, and other paved surfaces, and include shade trees near buildings to directly shield them from the sun's rays and reduce local air temperature and cooling energy demand.
- j) Provide physical improvements, such as sidewalk improvements (if needed), landscaping and bicycle parking that would act as incentives for pedestrian and bicycle modes of travel.

However, even with adherence to the above mitigations, impacts to cumulative air emissions as a result of approving and implementing the Project could not be reduced to a less-than-significant level and this impact would remain significant and unavoidable.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR. However, even with adherence to these measures, the Project's contribution to cumulative air emissions will remain significant and unavoidable.

Rationale: Adherence to the above mitigation will reduce the Project's contribution to cumulative air emissions will not be reduced to a less-than-significant level.

**Supplemental Impact NOISE-1: construction noise impacts.** Activities required to

demolish existing improvements on the project site and construct townhouses and condominiums would result in significant noise generation for adjacent sensitive receptors. DSEIR p. 68.

Mitigation. To reduce daytime noise impacts due to construction, the project sponsor shall require construction contractors to implement the following measures:

- a) Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).
- b) Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or other measures to the extent feasible.
- c) Monitor the effectiveness of any noise attenuation measures by taking noise measurements to the extent there are persistent and on-going complaints.

Prior to the issuance of building permit, along with the submission of construction documents, the project sponsor shall submit to the City Building Department a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:

- d) A plan for posting signs on-site pertaining to permitted construction days and hours and complaint procedures and who to notify in the event of a problem;
- e) A listing of telephone numbers (during regular construction hours and off-hours);
- f) The designation of an on-site construction complaint manager for the project;
- g) Notification of neighbors at least 30 days in advance of pile-driving and/or other extreme noise-generating activities about the estimated duration of the activity; and
- h) A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise mitigation and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale: The Project developer will be required undertake a comprehensive plan to notify adjacent residents and provide for a on-site individual to respond to any noise concerns raised by neighbors to ensure that short-term construction noise levels will be minimized.

**Supplemental Impact NOISE-2: Land use compatibility impacts.** Many of the buildings in the proposed Estrella complex would be exposed to exterior noise levels of between 60 and 75 DNL dBA. Two of the proposed buildings would be exposed to an exterior noise level greater than 75 DNL dBA. Balconies on the townhome and podium buildings fronting on South Main Street, as well as other balconies in buildings along Montague Expressway may also be exposed to noise levels greater than acceptable (DNL of 65 dBA) under the Noise Element. Excessive noise may also result if air conditioning equipment is placed on balconies. DSEIR p.70.

**Mitigation:** The following shall be incorporated into construction plans and specifications to ensure that City and State noise exposure levels are met:

- a) Sound rated windows and mechanical ventilation systems shall be required for residences that exceed City and State noise levels.
- b) For small balconies and decks in buildings near the adjacent roadways, solid balcony railings or partial enclosures may be needed to meet acceptable levels if the outdoor standard is applied to these areas. In some dwellings that are close to adjacent roadways, decks may need to be enclosed or solid railings of up to seven feet in height may need to be installed to meet the standard. If acceptable noise levels cannot be met, balconies shall be removed.
- c) Air conditioning equipment shall be placed in side yards of dwellings and shielded so as not to exceed a DNL of 65 dBA or otherwise increase the  $L_{dn}$  by more than 3 dBA, whichever is more restrictive.
- d) A follow-up acoustical analysis shall be prepared during the architectural design phase and submitted to the City of Milpitas Building Division demonstrating show how the City exterior and interior standards are met.

**Finding:** Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

**Rationale:** The Project developer will be required install sound-rated windows and place exterior air conditioning equipment in a manner so as to reduce significant noise levels on adjacent residences. For upper balconies for dwelling units located near adjacent roadways, the Project developer may be required to install noise barriers to meet City noise exposure levels. The effectiveness of these measures will be confirmed with additional noise confirmation analyses.

**Supplemental Impact NOISE-3: Stationary noise impacts.** Noise generated by exterior equipment, including pool equipment, would be audible to properties off of the project site. DSEIR p 71.

**Mitigation:** Mechanical equipment associated with the pool shall be designed so as to not exceed a DNL of 58 dBA at the adjacent property line. This would limit any increase in the DNL to less than 3 dBA and be consistent with the City standard. Specific measures to limit

stationary sources could include muffling equipment, selecting low noise generating equipment and shielding significant noise sources.

In addition, air-conditioners shall be designed so as to not exceed a DNL of 65 dBA or increase existing ambient noise levels by more than 3 dBA at adjacent units. This may require that air-conditioners not be allowed on certain balconies. Possible solutions include selection of quiet air-conditioners, placement of air conditioning units on the roof of buildings or placement of the air conditioners at ground level next to buildings. In some cases air conditioning units may need to have acoustical screening (e.g. noise barriers) to allow the units to operate and not significantly increase ambient noise levels.

Finding: Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant effect identified in the Supplemental EIR.

Rationale: The Project developer will be required to install quiet-type air conditioning units and place exterior air conditioning equipment in a manner so as to reduce significant noise levels on adjacent residences.

## **EXHIBIT B**

### **Project Alternatives**

Public Resources Code section 21002 provides that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would *substantially lessen* the significant environmental effects of such projects[.]” (Pub. Resources Code, § 21002, italics added.) The same statute states that the procedures required by CEQA “are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will *avoid* or *substantially lessen* such significant effects.” (*Ibid.*, italics added.) Section 21002 goes on to state that “in the event [that] specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects.” (*Ibid.*)

CEQA defines “feasible” to mean “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors.” (Pub. Resources Code, § 21061.1.) The CEQA Guidelines add another factor: “legal” considerations. (CEQA Guidelines, § 15364; see also *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 565 (*Goleta II*).) Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site. (CEQA Guidelines, § 15126.6, subd. (f)(1).) The concept of “feasibility” also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project. (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417; see also *Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490, 1500-1507.)

Where a significant impact can be substantially lessened (i.e., mitigated to an “acceptable level”) solely by the adoption of mitigation measures, the lead agency, in drafting its findings, has no obligation to consider the feasibility of alternatives with respect to that impact, even if the alternative would mitigate the impact to a greater degree than the Project. (Pub. Resources Code, § 21002; *Laurel Hills Homeowners Association, supra*, 83 Cal.App.3d at p. 521; see also *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 691, 730-731; and *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376, 400-403.) In short, CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Project modification or alternatives are not required, however, where such changes are infeasible or where the responsibility of modifying the project lies with some other agency. (CEQA Guidelines, § 15091, subds. (a)(2), (a)(3).)

The Midtown EIR identified three alternatives: No Project, Higher Residential Density

Development Alternative and Lower Density Alternative. The City Council found that the No Project Alternative was infeasible because it would not fulfill the primary objectives of the Midtown Specific Plan to establish an attractive pedestrian-oriented mixed-use district centering on the historic Main Street corridor. This Alternative would also not fulfill Specific Plan objectives of providing for a significantly increased housing opportunity for the City of Milpitas. Finally, this Alternative would not avoid the significant unavoidable traffic and air quality impacts associated with the Specific Plan.

The Higher Residential Development Density Alternative was found infeasible by the City Council since it would have increased wastewater flows from the Project area compared to the proposed Project. This Alternative would not have avoided all of the significant traffic impacts associated with the Midtown Specific Plan. Similarly, significant air quality emissions would be reduced under this Alternative, but not avoided.

The Lower Density Alternative was found to be infeasible by the City Council since it would not have provided an efficient co-location of transit friendly land uses and supporting pedestrian connections as the proposed Project. This Alternative would not have provided for residential mixed uses along Main Street nor would it have provided optimum residential development densities to support increased transit use. Also, this Alternative would not have avoided all local street intersection impacts and freeway impacts as identified for the Project. Significant air quality impacts would be reduced but not avoided.

The Supplemental EIR includes the Alternatives analyzed in the Midtown EIR and includes one additional Alternative, which would be development of the Project site under the Multifamily Medium Density Residential land use designation, (DSEIR pages 81-83). The DSEIR concludes that this Alternative would result in somewhat less impacts in terms of traffic generation, air emissions, water demand, wastewater generation and noise impacts, but would not be fully consistent with the goals and objectives of the Midtown Specific Plan of encouraging high density housing along the Main Street corridor. Also, the Multifamily Medium Density Alternative would not avoid significant impacts related to local intersections, freeway operations, or project contribution to regional and cumulative air emissions. Therefore, the Multifamily Medium Density Residential Alternative is found to be infeasible.

## **EXHIBIT C**

### **Statement of Overriding Considerations**

1. General. Pursuant to CEQA Guidelines Section 15093, the City Council of the City of Milpitas adopted a Statement of Overriding Considerations for those impacts identified in the Midtown Specific Plan EIR as significant and unavoidable (Resolution No. \_\_\_\_-). The City Council carefully considered each impact in its decision to approve the Midtown Specific Plan. The Project proposes a change and intensification of land uses for properties generally bounded by Union Pacific Railroad lines on the east and north of the planning area, Abel Street and the Elmwood Rehabilitation Center on the west and the City limits on the south.

The City has prepared a Supplemental EIR for the 11-acre Estrella development Project within the overall Midtown Specific Plan areas that would change the General Plan and Midtown Specific Plan land use designations from "MP-Industrial Park" district to "R-4-Residential Very High Density." The Estrella site is located in the southern portion of Milpitas, bounded on the north and west by a single family residential neighborhood, on the east by South Main Street and on the south by Montague Expressway. The Supplemental EIR identified that the proposed Estrella Project would cause future roadway segments near the Project site to operate at significant and unavoidable Levels of Service in the future and that the Estrella Project would result in regional and cumulative air emissions to be significant and unavoidable.

The City Council adopted a Statement of Overriding Considerations with the approval of the Midtown Specific Plan in 2002 and the City Council must adopt new overriding considerations for the previously identified. The City Council must adopt new overriding considerations for the supplemental impacts identified in the Supplemental EIR as significant and unavoidable. The City Council believes that many of the unavoidable impacts identified in the Midtown EIR and the Estrella Supplemental EIR will be substantially lessened by adherence to mitigation measures contained in the Midtown EIR and additional mitigation measures identified in the Estrella Supplemental EIR.. Even with mitigation, the City Council recognizes that implementation of the Project carries with it unavoidable adverse impacts as identified in the Midtown EIR and the Estrella Supplemental EIR. The City Council specifically finds that to the extent the identified adverse impact or potentially adverse impact for the Project have not been mitigated to acceptable levels, there are specific economic, social, environmental, land use or other considerations that support the approval of the Project.

2. Unavoidable Significant Adverse Impacts from the Midtown EIR. The following unavoidable significant environmental impacts identified in the Midtown EIR for future development of the Midtown Specific Plan area also apply to the Estrella project:

*Impact Traffic-1*. Unacceptable Intersection Operations for Baseline Plus Project: Future development of the Midtown Project could result in unacceptable operations for 14 intersections in and around the Midtown area. DEIR pp. 3.9-26 to -34. Although



mitigation measures are identified in the DEIR that will allow for acceptable Levels of Service for many intersections, such improvements will not allow all Project intersections to operate at acceptable levels.

*Impact Traffic-2. Unacceptable Freeway Operations for Baseline Plus Project.* Added traffic from development allowed under the Midtown Project will exacerbate already unacceptable traffic operations at one freeway segment during the AM peak hour and 10 freeway segments during the PM peak hour. DEIR pp.3.9-34, -35. Although a VTA prepared Countywide Deficiency Plan would require payment of regional impact fees to fund regional transportation improvements, but until such regional fees are imposed and regional improvements implemented, freeway impacts will remain significant and unavoidable. DEIR p. 3.9-35.

*Impact Traffic-3. Unacceptable Roadway Segment Operations under Future Conditions.* Added traffic from the Midtown Project would exacerbate future cumulative traffic conditions on certain roadway segments that are anticipated to operate at unacceptable levels under the General Plan. Project traffic would also cause two roadway segments to degrade to unacceptable levels under cumulative conditions. DEIR pp. 3.9-38 to -41. The Montague Expressway widening project will reduce overall congestion and improve traffic flow in the Project area; however, such improvements will reduce but not avoid this significant traffic impact.

*Impact Air-2. Long-term Regional Air Emissions:* Estimated increases on air emissions from future development of the Midtown Project would exceed BAAQMD thresholds for regional criteria pollutants,. DEIR 2.10-9 to -11. Compact and complementary land uses will allow future development in the Midtown area to more efficiently use available circulation facilities and provide both bicycle and pedestrian alternatives to auto use. Land use patterns and densities will reduce both auto traffic and air quality impacts; however, with the intensity of use needed to make the Midtown's area orientation the most effective, air emission standards will still be exceeded.

*Impact Air-3. Cumulative Long-term Regional Emissions:* Future development of the Midtown area will increase vehicle and residential emissions that will contribute to cumulatively considerable air quality impacts from existing and projected exceedances of state and federal air quality standards, DEIR. pp 3.10-11 to -13. As with the previous impact, compact land use areas and complementary mixed land uses will allow future development in the Midtown area to efficiently use available transportation facilities and to provide increased opportunities for bicycle and pedestrian circulation modes. The land use pattern envisioned in the Midtown Project will reduce but not substantially avoid both traffic and air quality impacts and the Midtown Project's contribution to these impacts on a cumulative basis.

3. Unavoidable Significant Adverse Impacts from the Estrella Supplemental EIR. The following unavoidable significant impacts were identified in the Supplemental EIR for the Estrella EIR.

*Supplemental Impact Traffic-1. Future roadway segment impacts.* In the year 2030, traffic generated by the proposed project along with other buildout traffic, would cause the roadway segments of Montague Expressway between South Main Street and I-880 (westbound) and South Main Street between Montague Expressway and South Abel Street (northbound and southbound) to exceed traffic thresholds of significance during the AM peak hour. This impact would include segments of Montague Expressway between McCarthy Boulevard and I-880 (eastbound) and South Main Street between South Abel Street to Montague Expressway (northbound and southbound) in the PM peak.

*Supplemental Impact AIR-2. Regional air emissions.* The project would result in a small increase in the regional emissions associated with development of the Midtown Specific Plan. The increase in emissions would be less than the BAAQMD significance thresholds, but the impacts of the Midtown EIR would be significant and unavoidable.

*Supplemental Impact AIR-3. Cumulative air emissions.* The project would result in a small increase in the regional emissions associated with development of the Midtown Specific Plan. The increase in emissions would be less than the BAAQMD significance thresholds, but the cumulative impacts of the Midtown Specific Plan would be significant and unavoidable.

4. Overriding Considerations. The Milpitas City Council previously balanced the benefits of the Midtown Specific Plan Project approvals against the significant and potentially significant adverse impacts identified in the Midtown EIR. The City Council now balances those unavoidable impacts that apply to future development on the Estrella Project site as well as the supplemental unavoidable impacts identified in this Supplemental EIR, against its benefits, and hereby determine that such unavoidable impacts are outweighed by the benefits of the Estrella development Project as further set forth below.

The Estrella Project will further the goals of the Midtown Specific Plan by allowing the approval and development of Multifamily High Density Residential on the 11-acre site that will facilitate development of 369 dwelling units that will increase the resident population base within the Midtown area to support the development and operation of retail commercial, office and other land uses planned for the Midtown area.

The Project will provide for high density ownership opportunities in the City that may not be offered by other housing development projects and will also assist the City of Milpitas in meeting their fair share of regional housing as identified by the Association of Bay Area Governments.

The Estrella Project will also provide opportunities for Milpitas residents and construction materials suppliers.

**EXHIBIT D**

**Final Supplemental Environmental Impact Report**

# WARMINGTON HOMES

---

CALIFORNIA

## PROJECT DESCRIPTION

### ESTRELLA

Over the past 85 years, the Warmington Group of Companies has built more than 40,000 homes throughout California and Nevada. Warmington Homes California began acquiring a reputation for building homes of exceptional quality and value with their first custom homes in the 1920's. The high quality and design was how Warmington Homes became known as the homebuilder to the stars. That timeless reputation has been proudly upheld from the first planned neighborhood developed in the 1940's to every new community Warmington Homes builds, continuing the homebuilding legacy that began so many years ago.

The project site is located at the northwestern corner of South Main Street and Montague Expressway and is presently a business park built in the 1980's. Warmington Capital Partners acquired the industrial site approximately a year and a half ago in 2005. The industrial park is in need of major renovations and updating. The industrial park has had declining occupancy due to a need for updating and that it is a lone industrial area that is geared toward industrial and not residential-serving businesses. Warmington Capital Partners asked Warmington Homes California to take the lead in assessing what the City of Milpitas, the neighbors and Warmington Homes thought would be the best approach to take with the site.

Estrella is a project proposed by Warmington Homes California to implement the Midtown Specific Plan vision of a southern gateway to Milpitas. The Midtown Specific Plan vision is for a higher density, transit-oriented and pedestrian friendly Gateway to Milpitas. The proposed project was designed with these goals along with extensive neighborhood and City Staff input in mind. The project is the design of Lowell Hawkins, a senior partner at the Dahlin Group, an award-winning designer of residential and mixed-use communities. The primary objective is the design of elegant luxury condominiums in a lush, peaceful setting. There are three distinctive styles within the project, attached town homes, condos and stacked luxury flats over underground parking, to provide the diversity of product envisioned in the Midtown Specific Plan. All the homes are oriented around landscaped courtyards or pedestrian friendly paseos.

Warmington Homes California met with many of the future neighbors in the Starlight Pines neighborhood for input in the project development process. Warmington Homes even named the project Estrella, Italian for starlight to compliment the Starlight Pines name. After compiling neighbor and city staff advice and comments, Warmington Homes has designed a project that will provide a superior Milpitas experience for present and future Milpitanians.

The (western and northern edge of the property) adjoining the Starlight Pines was designed to preserve and enhance neighbor privacy and visual impacts. One of our main concerns was to preserve the perimeter tree canopy between the neighbors to the west. This will be done by selectively thinning or removing some of the over-planted trees. Warmington Homes will then replant trees as needed to preserve the tree canopy thereby increasing the privacy of our neighbors. Warmington Homes doubled the required setbacks along the sound wall and added a walking path and additional park amenities with quiet landscaped paseos between the town homes. Along the perimeter walls will be town homes. These town homes are designed with a one-story element that will step back to two stories over a garage, a total of three story town homes.

The eastern edge of the property fronts South Main Street. We propose three 4-story buildings consisting of town homes and larger luxury flats. The buildings will have 83, 83 and 91 dwelling units respectively. Warmington Homes was very sensitive to the fact that parking is a major issue to residents of Milpitas. The major constraint of the project was to make sure there is adequate parking for residents and guests. Estrella provides two-car covered parking for each unit, with the exception of five 1-bedroom units that have one parking space. Parking is provided in three subterranean parking garages. Warmington Homes has exceeded the Midtown Specific Plan requirements for parking. Each building is oriented around a private landscaped courtyard with a lush walking paseo between building one and two, to encourage pedestrian access. Warmington Homes is working closely with the City of Milpitas' Traffic Engineering Department in creating a pedestrian-friendly entrance to Milpitas. Warmington Homes will be taking the lead in implementing the Milpitas Traffic Engineering Department's Plan Line Study on South Main Street from Montague Expressway to Cedar Street. The Plan Line Study calls for wide pedestrian sidewalks with large canopied street trees planted in decorative wells, bicycle parking, decorative pedestrian-oriented street lighting and street furniture. Warmington Homes will be putting in landscaped and lighted raised median on South Main Street including slurry and striping. Warmington Homes will be adding traffic calming measures, improving the VTA bus stop and adding a new traffic signal at the intersection of our project and our affordable partner, Global Premier's project. Warmington Homes tax increment will be used to repay the Redevelopment Agency loan to Global for the Aspen Village, 101 very low-income apartments.

Warmington Homes is committed to providing a peaceful park-like setting for Estrella. The community center will consist of a full size pool, comfortable lounge, community meeting room with kitchen facilities, and a patio. There will be a community gym complete with full bathroom and changing area. A shaded path will meander through the park-like setting along the western perimeter of the property connecting with the landscaped paseos between the town homes and meeting at the raised pedestrian paseo between the first two podium buildings. All the community areas will be professionally planned and landscaped.

MILPITAS, CALIFORNIA

**DAHLIN GROUP**  
5865 OWENS DRIVE  
PLEASANTON CA 94588  
925-251-7201

WARMINGTON HOMES, CALIFORNIA  
2010 CROW CANYON PL. SUITE 450  
SAN RAMON CA 94583  
925-866-6700

**RUGGERI-JENSEN-AZAR & ASSOCIATES**  
8055 CAMINO ARROYO  
GILROY, CA 95020  
408-848-0300

**RANDALL PLANNING AND DESIGN**  
1475 NORTH BROADWAY, SUITE 290  
WALNUT CREEK, CA 94596  
925-934-8002

A. RECORD OWNER: SB TECH CENTER, LLC

SUBDIVIDER:  
THE WASHINGTON GROUP  
2010 CROW CANYON PL. SUITE 450  
SAN RAMON CA 94583  
925-866-6700

B. GROSS AREA: 11.25 AC±

C. MINIMUM LOT SIZES 4,820± SF  
5-PLEX TOWNHOME:

D. EXISTING LAND USE: COMMERCIAL/INDUSTRIAL

E. PROPOSED LAND USES:

RESIDENTIAL

16 LOTS - 111 TOWNHOME CONDOMINIUM UNITS  
3 LOTS - 257 CONDOMINIUMS (PODIUM UNITS)  
368 TOTAL

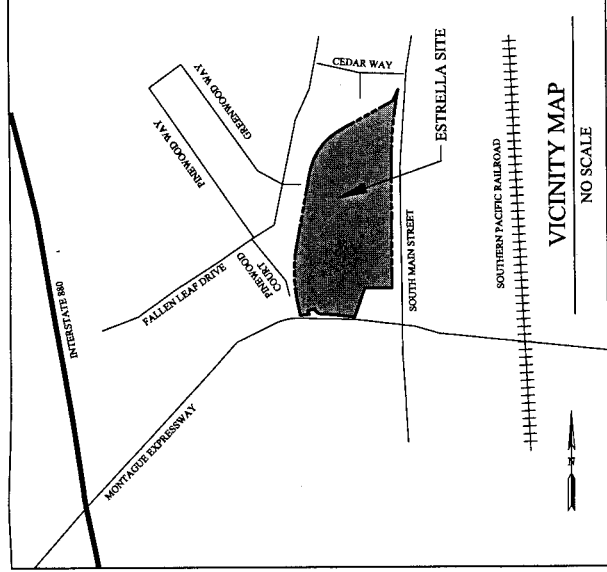


F.	WATER: CITY OF MILPITAS (STREET A)	Q.	SOUND WALLS AND MASONRY WALLS; ALL WALLS WILL BE PRIVATE FACILITIES AND MAINTAINED BY THE HOMEOWNERS/HOMEOWNER'S ASSOCIATION.
G.	SEWER: PRIVATE (COURT STREETS)	R.	PROPOSED GRADES AS SHOWN ARE PRELIMINARY. FINISH GRADING IS SUBJECT TO FINAL DESIGN AND CITY APPROVAL.
H.	GAS AND ELECTRICITY: PG&E	S.	MULTIPLE FINAL MAPS MAY BE FILED ON THE LANDS SHOWN ON THIS TENTATIVE MAP. ANY PHASING MAP DIAGRAM IS SUBJECT TO CITY APPROVAL
I.	TELEPHONE: AT&T	T.	ALL GRADING SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS AND CONDITIONS OF THE GEOTECHNICAL ENGINEER AND SUPPLEMENTAL REPORTS REGARDING THIS PROJECT.
J.	CABLE TV: AT & T-COMCAST CABLE	U.	ALL EROSION CONTROL MEASURES SHALL BE DONE IN CONFORMANCE WITH THE CRITERIA AND STANDARDS OF THE CITY OF MILPITAS.
K.	STREET TREES: INSTALLED PER CITY STANDARD NO. 448, MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.	V.	THE EXISTING TOPOGRAPHY IS BASED ON AERIAL SURVEYS DATED 4-10-2006 PREPARED BY AERO-GEODETHIC CORPORATION. THE CONTOURS SHOWN ON THIS PLAN REPRESENT GROUND ELEVATIONS, AS DETERMINED AT THE TIME OF SAID SURVEY.
L.	STREETS: ALL STREETS WITHIN THE RESIDENTIAL AREA WILL BE PRIVATELY MAINTAINED BY A HOMEOWNERS ASSOCIATION. ALL PRIVATE STREETS WILL BE IN PSUE'S (MIN. LONGITUDINAL SLOPE = 0.6%)	W.	GRADING, SURFACE IMPROVEMENTS, AND UTILITIES ARE CONCEPTUAL AND ARE SUBJECT TO REVISION AND CITY APPROVAL DURING FINAL DESIGN.
M.	WATER FACILITIES: PROPOSED WATER FACILITIES WILL BE CONSTRUCTED PER CITY OF MILPITAS STANDARDS. WATER WITHIN STREET A WILL BE PUBLICLY OWNED & MAINTAINED.	X.	COMMON OPEN SPACE PARCELS AND STREET PARCELS MAY BE SPLIT INTO ADDITIONAL PARCELS AS PART OF MULTIPLE FINAL MAPS.
N.	STORM DRAIN & SEWER FACILITIES: PROPOSED STORM DRAIN AND SEWER WITHIN PRIVATE STREETS WILL BE PRIVATE FACILITIES AND MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.	Y.	BUILDING DESIGNATIONS ARE FOR IDENTIFICATION PURPOSES ONLY AND ARE NOT INTENDED AS FINAL.
O.	DATUM: CITY OF MILPITAS DATUM		
P.	STREET LIGHTS: STREET LIGHTS ON PRIVATE STREETS WILL BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.		

TM-1	TITLE SHEET
TM-2	EXISTING SITE PLAN
TM-3	NEW SITE PLAN
TM-4	SITE DETAILS
TM-5	SITE CROSS SECTIONS
TM-6	LAND USE/LOTING
TM-7	CONCEPTUAL GRADING PLAN
TM-8	CONCEPTUAL GRADING PLAN
TM-9	CONCEPTUAL UTILITY PLAN

PROPOSED	EXISTING
CATCH BASIN	
ELECTRIC	
ELECTROLIC	
EXISTING CENTER LINE	
EXISTING EASEMENT	
EXISTING SITE	
EXISTING TREES TO BE REMOVED	
EXISTING TREES TO REMAIN	
FLOW DIRECTION	
LOT NUMBER	
UNIT NUMBER	
LOT LINE	
MANHOLE	
PROJECT BOUNDARY	
SANITARY SEWER	
SPOT GRADE	
STORM DRAIN	
WATER	

ACCESSORY'S PARCEL NUMBER	GP#	PODIUM GARAGE FINISHED FLOOR
AGGREGATE CONCRETE	HP	HIGH POINT
CATCH BASIN	LP	LOW POINT
CENTER LINE	MH	MASHOLE
	PL	PROPERTY LINE
CONCRETE MASONRY UNIT	PPF	PODIUM FINISHED FLOOR (LOWEST LIVABLE LEVEL)
CONCRETE	PSUE	PUBLIC SERVICES UTILITY EASEMENT
DRIVEWAY	R/W	RIGHT OF WAY
EMERGENCY VEHICLE ACCESS	SF	SQUARE FEET
EXISTING	SWK	SIDEWALK
FINISH FLOOR	"M" LINE	MONTEAGUE EXPRESSWAY STATION LINE
GRADE BREAK	"S" LINE	SOUTH MAIN STATION LINE



**Ruggeri - Jensen & Associates**  
ARCHITECTS • PLANNERS • SURVEYORS  
8055 CAMINO ARROYO • GILROY, CA 95020  
PHONE: (408) 848-0300 • FAX: (408) 848-0302

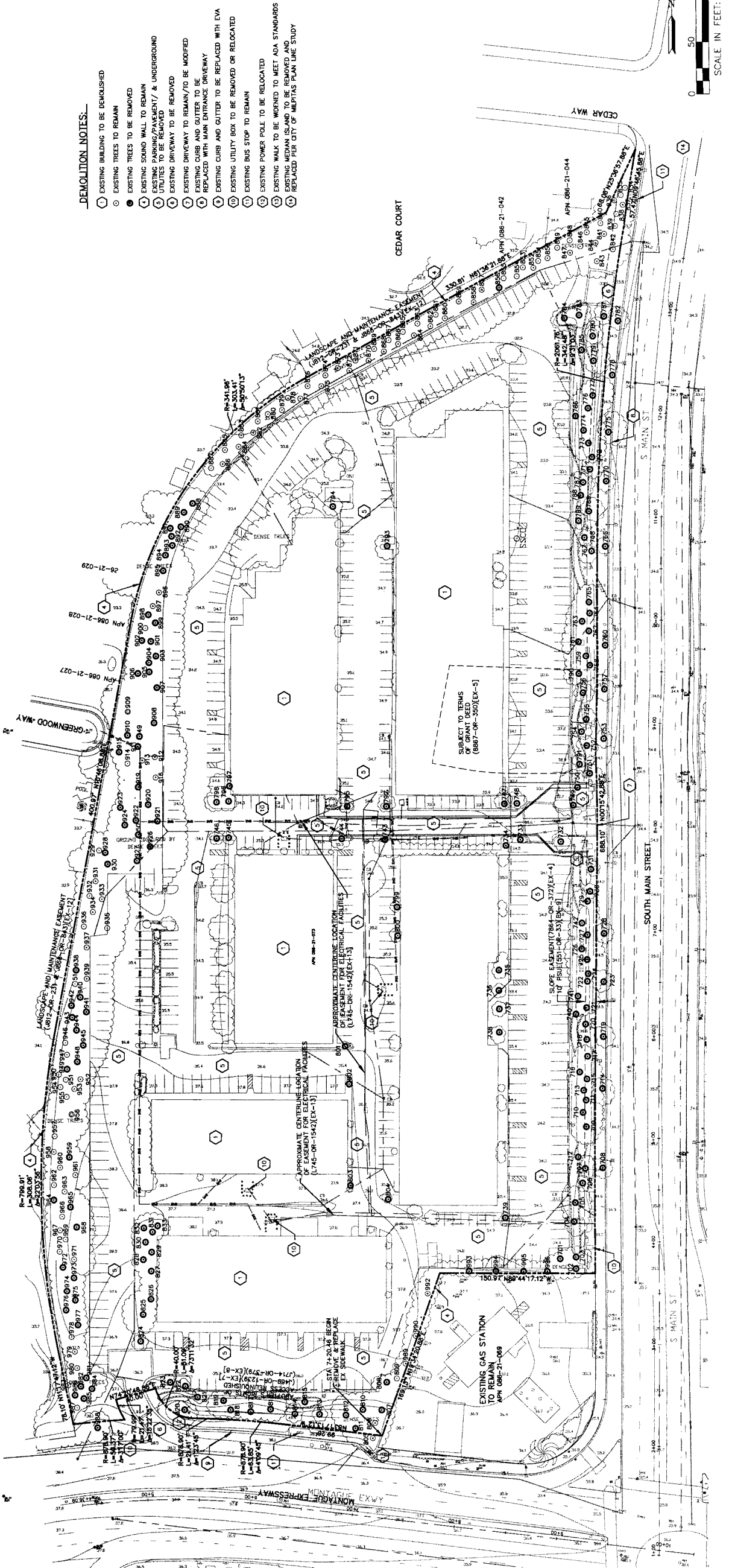
TENTATIVE MAP  
ESTRELLA  
TITLE SHEET  
MILPITAS, CALIFORNIA

[illegible]

700	Coast redwood	25	Remove	Good	709	Tulip tree	13	Remove	Good	827	Coast redwood	14	Preserve	Good	848	Coast live oak	8	Remove
701	Coast redwood	17	Remove	Good	710	Tulip tree	15	Remove	Good	828	Coast redwood	9	Preserve	Good	849	Coast live oak	4	Remove
702	Coast redwood	17	Remove	Good	711	Tulip tree	15	Remove	Good	829	Coast redwood	7	Remove	Good	850	Coast live oak	4	Remove
703	Coast redwood	17	Remove	Good	712	European birch	15	Remove	Good	830	Coast redwood	14	Remove	Good	851	Coast live oak	12	Preserve
704	Coast redwood	16	Remove	Good	713	European birch	15	Remove	Good	831	Coast redwood	7	Remove	Good	852	Coast live oak	9	Preserve
705	Coast redwood	16	Remove	Good	714	Coast redwood	22	Remove	Good	832	Coast redwood	14	Remove	Good	853	Coast live oak	6	Preserve
706	Coast redwood	16	Remove	Good	715	Coast redwood	24	Remove	Good	833	Coast redwood	7	Remove	Good	854	Coast live oak	6	Preserve
707	Coast redwood	12	Remove	Good	716	Coast redwood	22	Remove	Good	834	Coast redwood	7	Remove	Good	855	Coast live oak	6	Preserve
708	Coast redwood	12	Remove	Good	717	Tulip tree	25	Remove	Good	835	Coast redwood	4	Preserve	Good	856	Coast live oak	31	Preserve
709	Coast redwood	12	Remove	Good	718	Tulip tree	25	Remove	Good	836	Coast redwood	15, 13, 7	Remove	Good	857	Coast live oak	14	Preserve
710	Coast redwood	12	Remove	Good	719	Tulip tree	25	Remove	Good	837	Coast redwood	15	Preserve	Good	858	Coast live oak	14	Preserve
711	Coast redwood	12	Remove	Good	720	Tulip tree	9	Remove	Good	838	Shamel ash	14	Preserve	Good	859	Coast live oak	9	Remove
712	Coast redwood	12	Remove	Good	721	Tulip tree	9	Remove	Good	839	Shamel ash	14	Preserve	Good	860	Coast live oak	10	Preserve
713	Coast redwood	12	Remove	Good	722	European birch	18	Remove	Good	840	Shamel ash	14	Preserve	Good	861	Coast live oak	15	Preserve
714	Coast redwood	12	Remove	Good	723	European birch	18	Remove	Good	841	Shamel ash	14	Preserve	Good	862	Coast live oak	15	Preserve
715	Coast redwood	12	Remove	Good	724	European birch	18	Remove	Good	842	Shamel ash	14	Preserve	Good	863	Coast live oak	15	Preserve
716	Coast redwood	12	Remove	Good	725	Coast redwood	10	Remove	Good	843	Shamel ash	14	Preserve	Good	864	Coast live oak	17	Preserve
717	Coast redwood	12	Remove	Good	726	Coast redwood	10	Remove	Good	844	Shamel ash	14	Preserve	Good	865	Coast live oak	17	Preserve
718	Coast redwood	12	Remove	Good	727	Coast redwood	10	Remove	Good	845	Shamel ash	14	Preserve	Good	866	Coast live oak	17	Preserve
719	Coast redwood	12	Remove	Good	728	Coast redwood	10	Remove	Good	846	Shamel ash	14	Preserve	Good	867	Coast live oak	17	Preserve
720	Coast redwood	12	Remove	Good	729	Coast redwood	10	Remove	Good	847	Shamel ash	14	Preserve	Good	868	Coast live oak	17	Preserve
721	Coast redwood	12	Remove	Good	730	Coast redwood	10	Remove	Good	848	Shamel ash	14	Preserve	Good	869	Coast live oak	17	Preserve
722	Coast redwood	12	Remove	Good	731	Tulip tree	3, 3, 2	Remove	Good	849	Shamel ash	14	Preserve	Good	870	Coast live oak	17	Preserve
723	Coast redwood	12	Remove	Good	732	Tulip tree	14	Remove	Good	850	Shamel ash	14	Preserve	Good	871	Coast live oak	17	Preserve
724	Coast redwood	12	Remove	Good	733	Tulip tree	14	Remove	Good	851	Shamel ash	14	Preserve	Good	872	Coast live oak	17	Preserve
725	Coast redwood	12	Remove	Good	734	Tulip tree	7	Remove	Good	852	Shamel ash	14	Preserve	Good	873	Coast live oak	17	Preserve
726	Coast redwood	12	Remove	Good	735	Tulip tree	7	Remove	Good	853	Shamel ash	14	Preserve	Good	874	Coast live oak	17	Preserve
727	Coast redwood	12	Remove	Good	736	Tulip tree	9	Remove	Good	854	Shamel ash	14	Preserve	Good	875	Coast live oak	17	Preserve
728	Coast redwood	12	Remove	Good	737	Tulip tree	9	Remove	Good	855	Shamel ash	14	Preserve	Good	876	Coast live oak	17	Preserve
729	Coast redwood	12	Remove	Good	738	Tulip tree	9	Remove	Good	856	Shamel ash	14	Preserve	Good	877	Coast live oak	17	Preserve
730	Coast redwood	12	Remove	Good	739	Tulip tree	9	Remove	Good	857	Shamel ash	14	Preserve	Good	878	Coast live oak	17	Preserve
731	Coast redwood	12	Remove	Good	740	Tulip tree	9	Remove	Good	858	Shamel ash	14	Preserve	Good	879	Coast live oak	17	Preserve
732	Coast redwood	12	Remove	Good	741	European birch	12	Remove	Good	859	Shamel ash	14	Preserve	Good	880	Coast live oak	17	Preserve
733	Coast redwood	12	Remove	Good	742	European birch	12	Remove	Good	860	Shamel ash	14	Preserve	Good	881	Coast live oak	17	Preserve
734	Coast redwood	12	Remove	Good	743	Tulip tree	8	Remove	Good	861	Shamel ash	14	Preserve	Good	882	Coast live oak	17	Preserve
735	Coast redwood	12	Remove	Good	744	Tulip tree	8	Remove	Good	862	Shamel ash	14	Preserve	Good	883	Coast live oak	17	Preserve
736	Coast redwood	12	Remove	Good	745	Tulip tree	8	Remove	Good	863	Shamel ash	14	Preserve	Good	884	Coast live oak	17	Preserve
737	Coast redwood	12	Remove	Good	746	Tulip tree	8	Remove	Good	864	Shamel ash	14	Preserve	Good	885	Coast live oak	17	Preserve
738	Coast redwood	12	Remove	Good	747	Swiegum	12	Remove	Good	865	Shamel ash	14	Preserve	Good	886	Coast live oak	17	Preserve
739	Coast redwood	12	Remove	Good	748	Swiegum	12	Remove	Good	866	Shamel ash	14	Preserve	Good	887	Coast live oak	17	Preserve
740	Coast redwood	12	Remove	Good	749	Swiegum	12	Remove	Good	867	Shamel ash	14	Preserve	Good	888	Coast live oak	17	Preserve
741	Coast redwood	12	Remove	Good	750	Swiegum	12	Remove	Good	868	Shamel ash	14	Preserve	Good	889	Coast live oak	17	Preserve
742	Coast redwood	12	Remove	Good	751	Tulip tree	11	Remove	Good	869	Shamel ash	14	Preserve	Good	890	Coast live oak	17	Preserve
743	Coast redwood	12	Remove	Good	752	Tulip tree	11	Remove	Good	870	Shamel ash	14	Preserve	Good	891	Coast live oak	17	Preserve
744	Coast redwood	12	Remove	Good	753	Tulip tree	11	Remove	Good	871	Shamel ash	14	Preserve	Good	892	Coast live oak	17	Preserve
745	Coast redwood	12	Remove	Good	754	Tulip tree	11	Remove	Good	872	Shamel ash	14	Preserve	Good	893	Coast live oak	17	Preserve
746	Coast redwood	12	Remove	Good	755	Tulip tree	11	Remove	Good	873	Shamel ash	14	Preserve	Good	894	Coast live oak	17	Preserve
747	Coast redwood	12	Remove	Good	756	Tulip tree	11	Remove	Good	874	Shamel ash	14	Preserve	Good	895	Coast live oak	17	Preserve
748	Coast redwood	12	Remove	Good	757	Tulip tree	11	Remove	Good	875	Shamel ash	14	Preserve	Good	896	Coast live oak	17	Preserve
749	Coast redwood	12	Remove	Good	758	Coast redwood	20	Remove	Good	876	Shamel ash	14	Preserve	Good	897	Coast live oak	17	Preserve
750	Coast redwood	12	Remove	Good	759	Coast redwood	19	Remove	Good	877	Shamel ash	14	Preserve	Good	898	Coast live oak	17	Preserve
751	Coast redwood	12	Remove	Good	760	Coast redwood	19	Remove	Good	878	Shamel ash	14	Preserve	Good	899	Coast live oak	17	Preserve
752	Coast redwood	12	Remove	Good	761	Coast redwood	19	Remove	Good	879	Shamel ash	14	Preserve	Good	900	Coast live oak	17	Preserve
753	Coast redwood	12	Remove	Good	762	Coast redwood	19	Remove	Good	880	Shamel ash	14	Preserve	Good	901	Coast live oak	17	Preserve
754	Coast redwood	12	Remove	Good	763	Coast redwood	19	Remove	Good	881	Shamel ash	14	Preserve	Good	902	Coast live oak	17	Preserve
755	Coast redwood	12	Remove	Good	764	Coast redwood	19	Remove	Good	882	Shamel ash	14	Preserve	Good	903	Coast live oak	17	Preserve
756	Coast redwood	12	Remove	Good	765	Coast redwood	19	Remove	Good	883	Shamel ash	14	Preserve	Good	904	Coast live oak	17	Preserve
757	Coast redwood	12	Remove	Good	766	Coast redwood	19	Remove	Good	884	Shamel ash	14	Preserve	Good	905	Coast live oak	17	Preserve
758	Coast redwood	12	Remove	Good	767	Coast redwood	19	Remove	Good	885	Shamel ash	14	Preserve	Good	906	Coast live oak	17	Preserve
759	Coast redwood	12	Remove	Good	768	Coast redwood	19	Remove	Good	886	Shamel ash	14	Preserve	Good	907	Coast live oak	17	Preserve
760	Coast redwood	12	Remove	Good	769	Coast redwood	19	Remove	Good	887	Shamel ash	14	Preserve	Good	908	Coast live oak	17	Preserve
761	Coast redwood	12	Remove	Good	770	Coast redwood	19	Remove	Good	888	Shamel ash	14	Preserve	Good	909	Coast live oak	17	Preserve
762	Coast redwood	12	Remove	Good	771	Coast redwood	19	Remove	Good	889	Shamel ash	14	Preserve	Good	910	Coast live oak	17	Preserve
763	Coast redwood	12	Remove	Good	772	Coast redwood	19	Remove	Good	890	Shamel ash	14	Preserve	Good	911	Coast live oak	17	Preserve
764	Coast redwood	12	Remove	Good	773	Coast redwood	19	Remove	Good	891	Shamel ash	14	Preserve	Good	912	Coast live oak	17	Preserve
765	Coast redwood	12	Remove	Good	774	Coast redwood	19	Remove	Good	892	Shamel ash	14	Preserve	Good	913	Coast live oak	17	Preserve
766	Coast redwood	12	Remove	Good	775	Coast redwood	19	Remove	Good	893	Shamel ash	14	Preserve	Good	914	Coast live oak	17	Preserve
767	Coast redwood	12	Remove	Good	776	Coast redwood	19	Remove	Good	894	Shamel ash	14	Preserve	Good	915	Coast live oak	17	Preserve
768	Coast redwood	12	Remove	Good	777	Coast redwood	19	Remove	Good	895	Shamel ash	14	Preserve	Good	916	Coast live oak	17	Preserve
769	Coast redwood	12	Remove	Good	778	Coast redwood	19	Remove	Good	896	Shamel ash	14	Preserve	Good	917	Coast live oak	17	Preserve
770	Coast redwood	12	Remove	Good	779	Coast redwood	19	Remove	Good	897	Shamel ash	14	Preserve	Good	918	Coast live oak	17	Preserve
771	Coast redwood	12	Remove	Good	780	Coast redwood	19	Remove	Good	898	Shamel ash	14	Preserve	Good	919	Coast live oak	17	Preserve
772	Coast redwood	12	Remove	Good	781	Coast redwood	19	Remove	Good	899	Shamel ash	14	Preserve	Good	920	Coast live oak	17	Preserve
773	Coast redwood	12	Remove	Good	782	Coast redwood	19	Remove	Good	900	Shamel ash	14	Preserve	Good	921	Coast live oak	17	Preserve
774	Coast redwood	12	Remove	Good	783	Coast redwood	19	Remove	Good	901	Shamel ash	14	Preserve	Good	922	Coast live oak	17	Preserve
775	Coast redwood	12	Remove	Good	784	Coast redwood	19	Remove	Good	902	Shamel ash	14	Preserve	Good	923	Coast live oak	17	Preserve
776	Coast redwood	12	Remove	Good	785	Coast redwood	19	Remove	Good	903	Shamel ash	14	Preserve	Good	924	Coast live oak	17	Preserve
777	Coast redwood	12	Remove	Good	786	Coast redwood	19	Remove	Good	904	Shamel ash	14	Preserve	Good	925	Coast live oak	17	Preserve
778	Coast redwood	12	Remove	Good	787	Coast redwood	19	Remove	Good	905	Shamel ash	14	Preserve	Good	926	Coast live oak	17	Preserve
779	Coast redwood	12	Remove	Good	788	Coast redwood	19	Remove	Good	906	Shamel ash	14	Preserve	Good	927	Coast live oak	17	Preserve
780	Coast redwood	12	Remove	Good	789	Coast redwood	19	Remove	Good	907	Shamel ash	14	Preserve	Good	928	Coast live oak	17	Preserve
781	Coast redwood	12	Remove	Good	790	Coast redwood	19	Remove	Good	908	Shamel ash	14	Preserve	Good	929	Coast live oak	17	Preserve
782	Coast redwood	12	Remove	Good	791	Coast redwood	19	Remove	Good	909	Shamel ash	14	Preserve	Good	930	Coast live oak	17	Preserve
783	Coast redwood	12	Remove	Good	792	Coast redwood	19	Remove	Good	910	Shamel ash	14	Preserve	Good	931	Coast live oak	17	Preserve
784	Coast redwood	12	Remove	Good	793	Coast redwood	19	Remove	Good	911	Shamel ash	14	Preserve	Good	932	Coast live oak	17	Preserve
785	Coast redwood	12	Remove	Good	794	Coast redwood	19	Remove	Good	912	Shamel ash	14	Preserve	Good	933	Coast live oak	17	Preserve
786	Coast redwood	12	Remove	Good	795	Coast redwood	19	Remove	Good	913	Shamel ash	14	Preserve	Good	934	Coast live oak	17	Preserve</

### DEMOLITION NOTES:

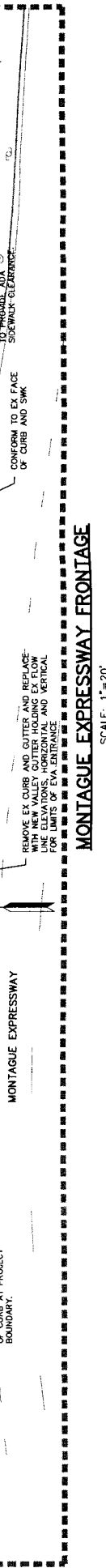
- ① EXISTING BUILDING TO BE DEMOLISHED
- ② EXISTING TREES TO REMAIN
- EXISTING TREES TO BE REMOVED
- ③ EXISTING SOUND WALL TO REMAIN
- ④ EXISTING DRIVEWAY & UNDERGROUND UTILITIES TO BE REMOVED
- ⑤ EXISTING DRIVEWAY TO BE REMOVED
- ⑥ EXISTING DRIVEWAY TO REMAIN /TO BE ACQUIRED
- ⑦ EXISTING CURB AND GUTTER TO BE REPLACED WITH MAIN ENTRANCE DRIVEWAY
- ⑧ EXISTING CURB AND GUTTER TO BE REPLACED WITH EVA
- ⑨ EXISTING UTILITY BOX TO BE REMOVED OR RELOCATED
- ⑩ EXISTING BUS STOP TO REMAIN
- ⑪ EXISTING POWER POLE TO BE RELOCATED
- ⑫ EXISTING WALK TO BE MOVED TO MEET ADA STANDARDS
- ⑬ EXISTING SIDEWALK TO BE REMOVED AND REPLACED FOR CITY OF MARIETTA PLANK LINE STUDY





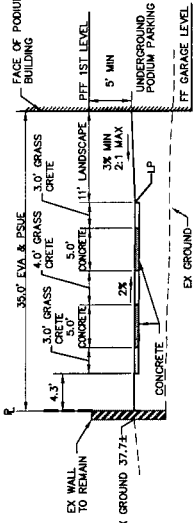






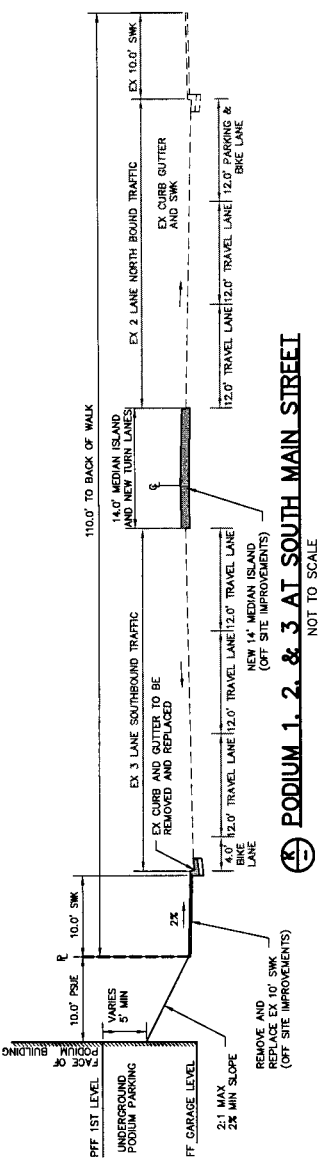
NOTES:

- ALL IMPROVEMENTS ALONG MAIN STREET ARE TO BE DONE IN ACCORDANCE WITH THE CITY OF MILPITAS SOUTH MAIN STREET PLAN LINE STUDY.
- IMPROVEMENTS TO INCLUDE: LANDSCAPING & IRRIGATION.
- HORIZONTAL AND FINAL ALIGNMENT TO BE COMPLETED BY CITY OF MILPITAS.
- NEW CURB, GUTTER, SIDEWALK EAST SIDE OF SOUTH MAIN ST.
- TYPE II SLURRY SEAL ENTIRE WIDTH OF SOUTH MAIN STREET.
- APPROXIMATELY 75'-LINE STATION +400 TO CEDAR WAY.



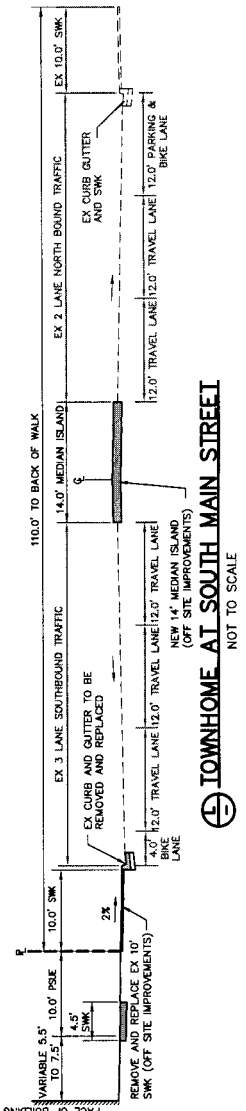
**FIRE TRUCK AT PODIUM 1**

**EVA/GARAGE ACCESS SOUTH OF PODIUM 1**  
NOT TO SCALE

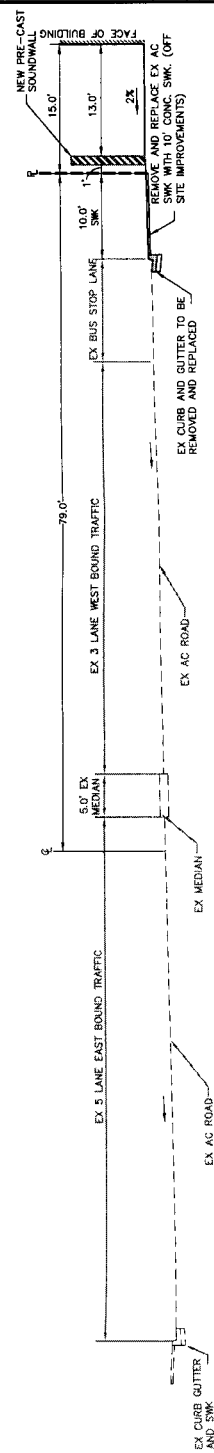


 **PODIUM 1, 2, & 3 AT SOUTH MAIN STREET**  
NOT TO SCALE

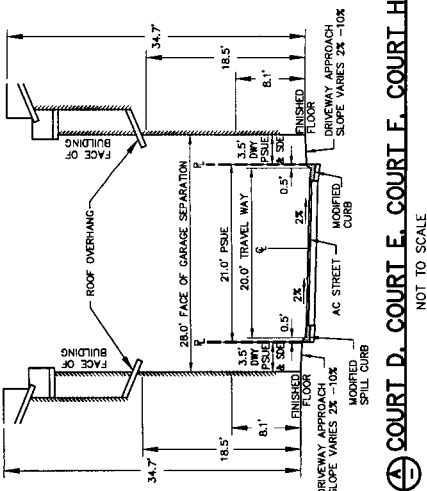
ALL IMPROVEMENTS ALONG MAIN STREET ARE TO BE DONE IN ACCORDANCE WITH THE CITY OF MILPITAS SOUTH MAIN STREET PLAN LINE STUDY



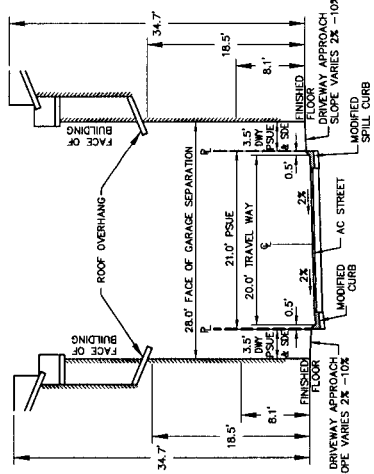
⓪ TOWNHOME AT SOUTH MAIN STREET  
NOT TO SCALE



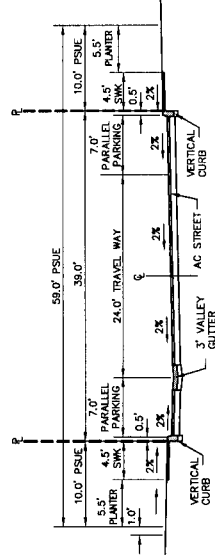
 **MONTAGUE EXPRESSWAY**  
NOT TO SCALE




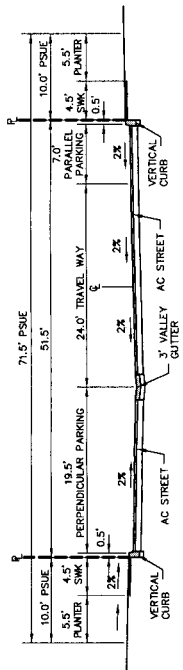
Ⓐ COURT D. COURT E. COURT F. COURT H  
NOT TO SCALE




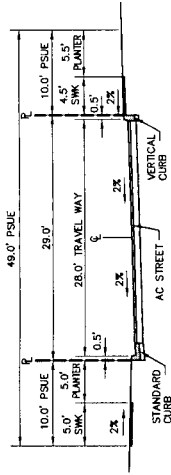
**COURT A. COURT B. COURT C. COURT G**  
NOT TO SCALE



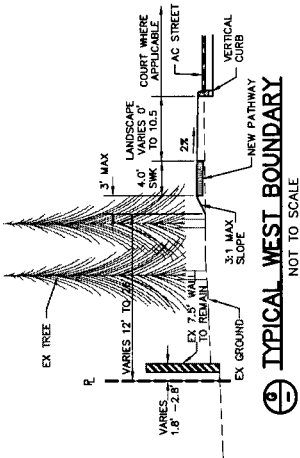
 **STREET A WITH PARALLEL PARKING ON BOTH SIDES**  
NOT TO SCALE




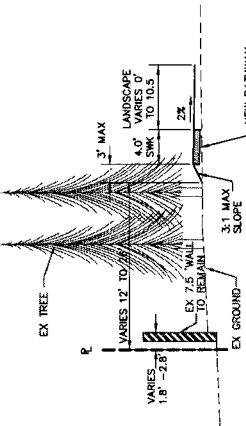
 STREET A WITH PARALLEL AND PERPENDICULAR PARKING  
NOT TO SCALE




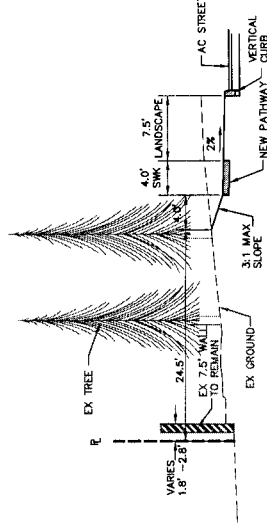
 STREET A WITH 28' TRAVEL WAY  
NOT TO SCALE



 **TYPICAL WEST BOUNDARY**  
NOT TO SCALE



 TYPICAL WEST BOUNDARY AT REC BUILDING  
NEW PATHWAY  
NOT TO SCALE



WEST BOUNDARY AT COURT C  
NOT TO SCALE

---

ITS	CUMULATIVE UNITS
	1-5
	6-11
	12-18
	19-26
	27-34
	35-42
	43-50
	51-57
	58-63
	64-69
	70-74
	75-79
	80-85
	86-92
	93-100
	101-106

REC BUILDING TO BE CONSTRUCTED  
BETWEEN OTHER PHASES

REC BUILDING TO BE CONSTRUCTED BETWEEN OTHER PHASES

MODEL (LAST)

PHASE 1

PHASE 2

PHASE 3

PHASE 4

PHASE 5

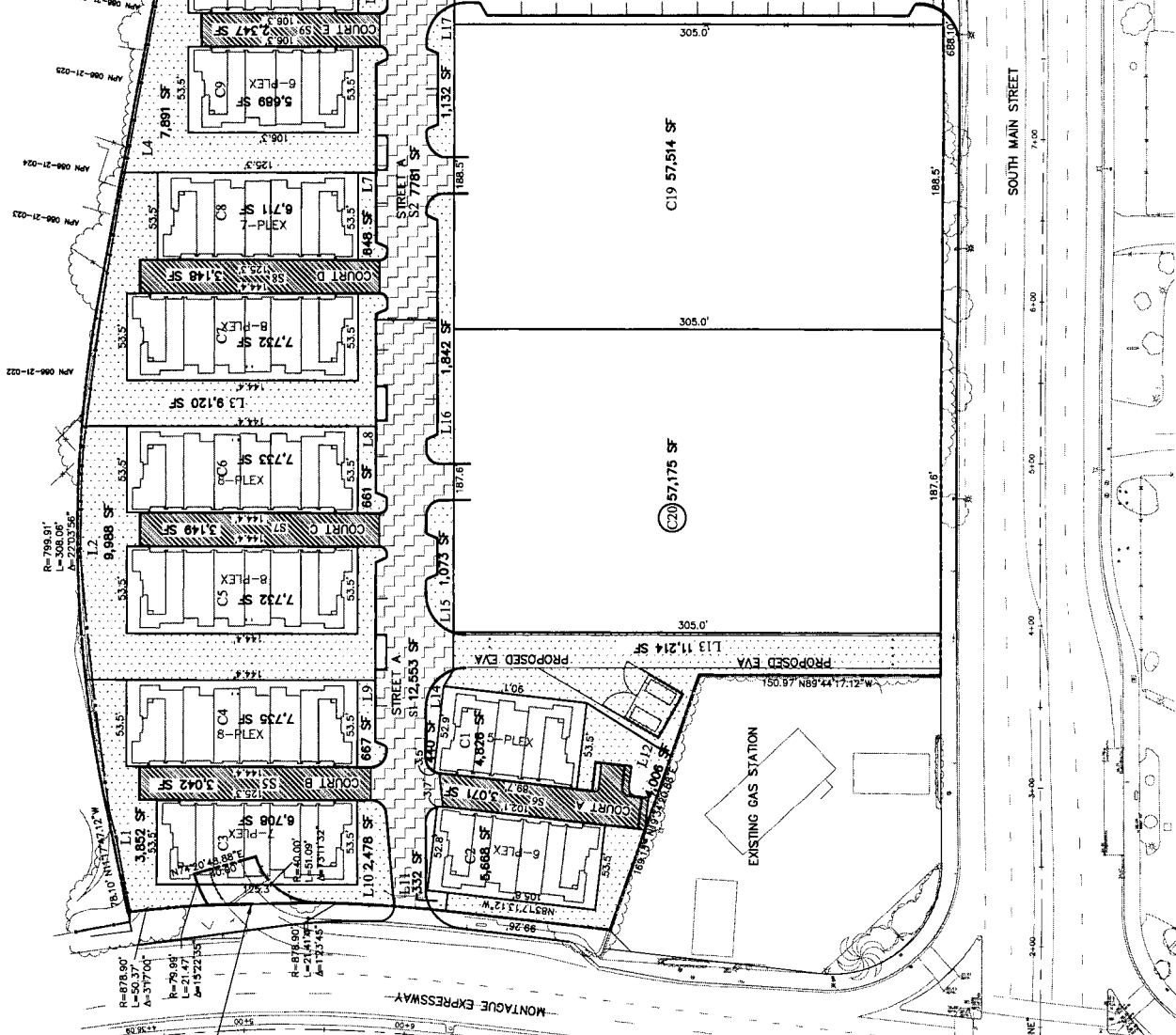
PHASE 6

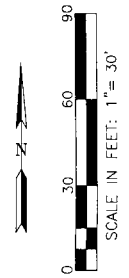
PHASE 7

PHASE 8

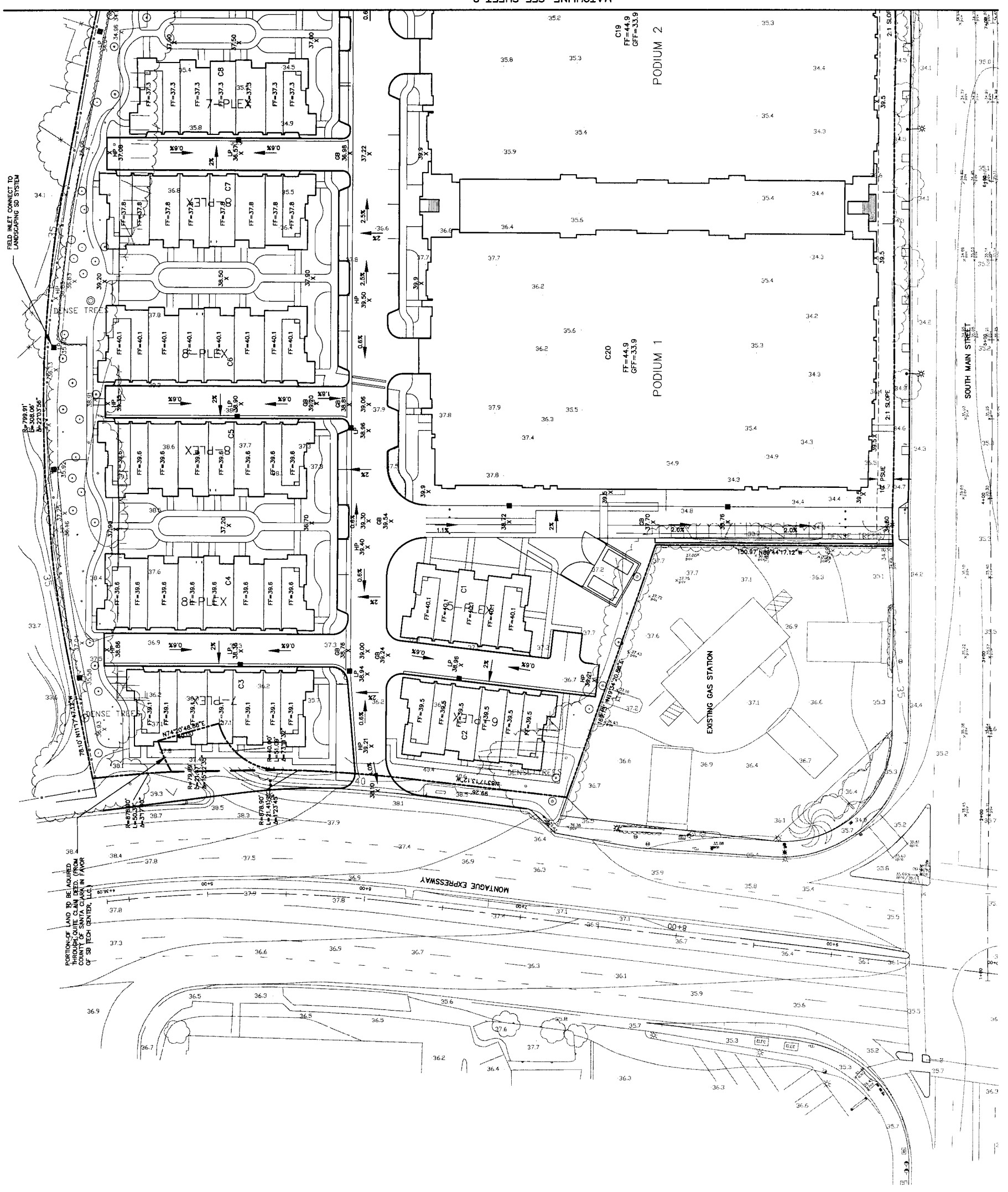
CONSTRUCTION PHASING  
NOT TO SCALE

APN 086-27



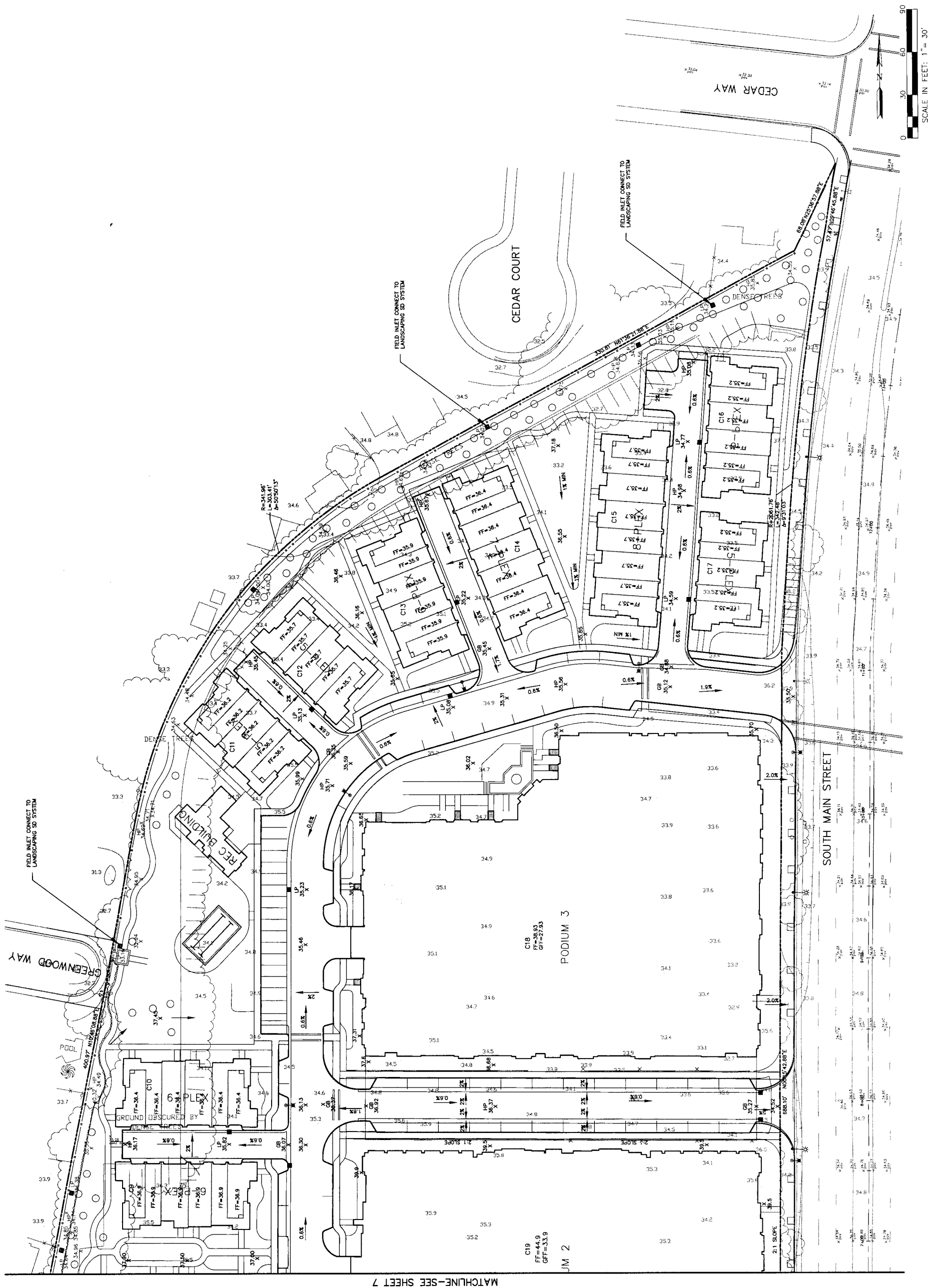


MATCHLINE-SEE SHEET 8

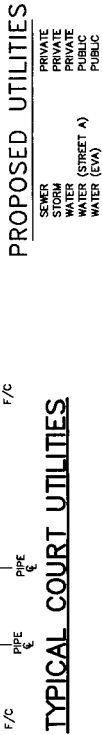


PORTION OF LAND TO BE ACQUIRED  
THROUGH EASE CLAIM FROM  
COUNTY OF SANTA CLARA IN FAVOR  
OF SB TECH CENTER, LLC

**Ruggieri -  
Jensen -  
Azar & Associates**  
INCUBATORS • PLANTERS  
8055 CAMINO ARROYO • GILROY, CA 95020

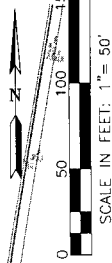






**NOTE:**

1. THE PROPOSED LOCATION AND SIZES OF ALL UTILITIES SHOWN ARE PRELIMINARY AND SUBJECT TO CHANGE.
2. ALL WET UTILITIES WITHIN COURTS ARE TO BE PRIVATELY OWNED AND MAINTAINED BY HOME OWNERS ASSOCIATION.



2007  
E  
50  
E

**TM-9**

OF 9 SHEETS  
JOB NO. 062005

TENTATIVE MAP  
ESTRELLA  
CONCEPTUAL UTILITY PLAN  
MILPITAS, CALIFORNIA

**Ruggieri - Jensen - Azar & Associates**  
 ATTORNEYS • PLANNERS • ESTATE PLANNERS  
 8055 CAMINO ARROYO • GILROY, CA 95020

8055 CAMINO ARROYO • GILROY, CA 95020  
PHONE: (408) 848-0300 • FAX: (408) 848-0302



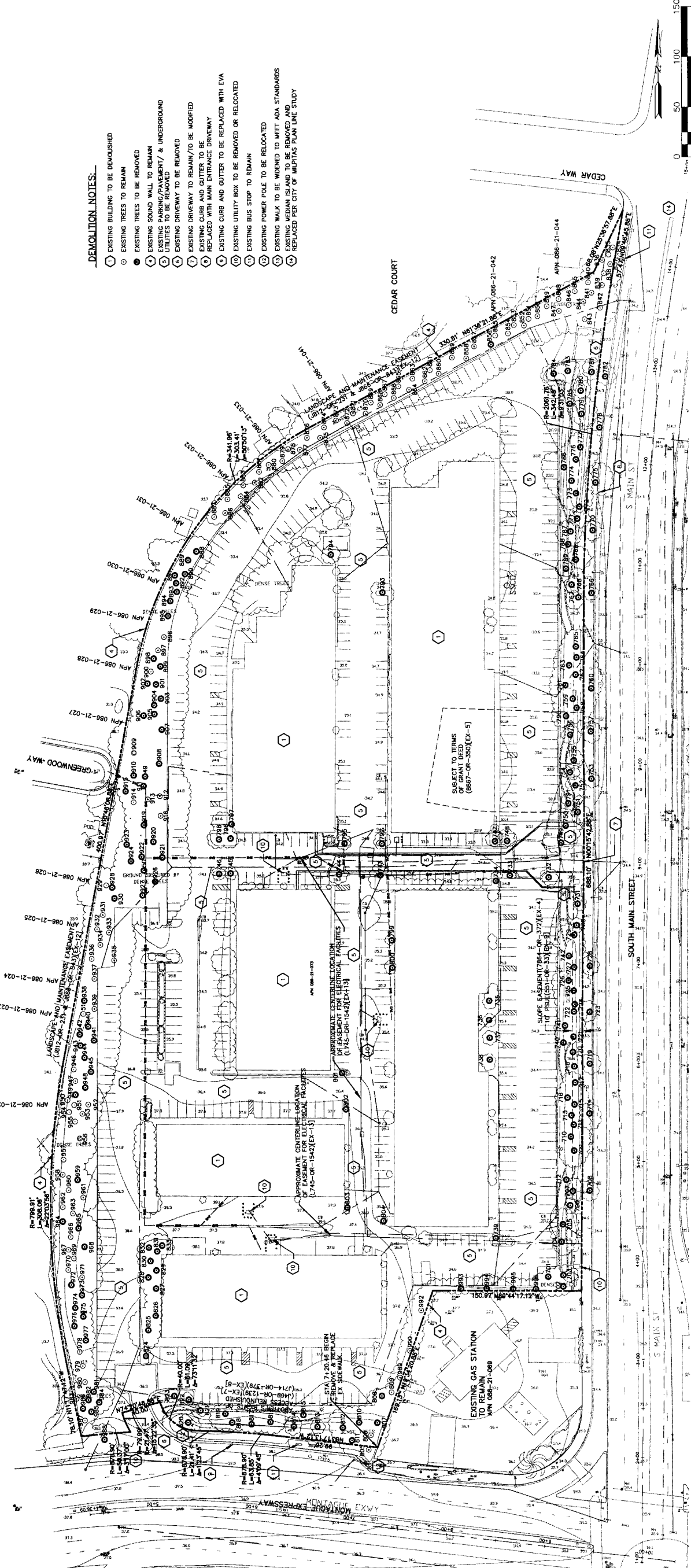
DATE	MAR. 2007
SCALE	I = .50'
DATE	
MR	
SHEET REVISIONS	BT CK

EXISTING TREE INVENTORY

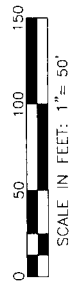
[illegible]

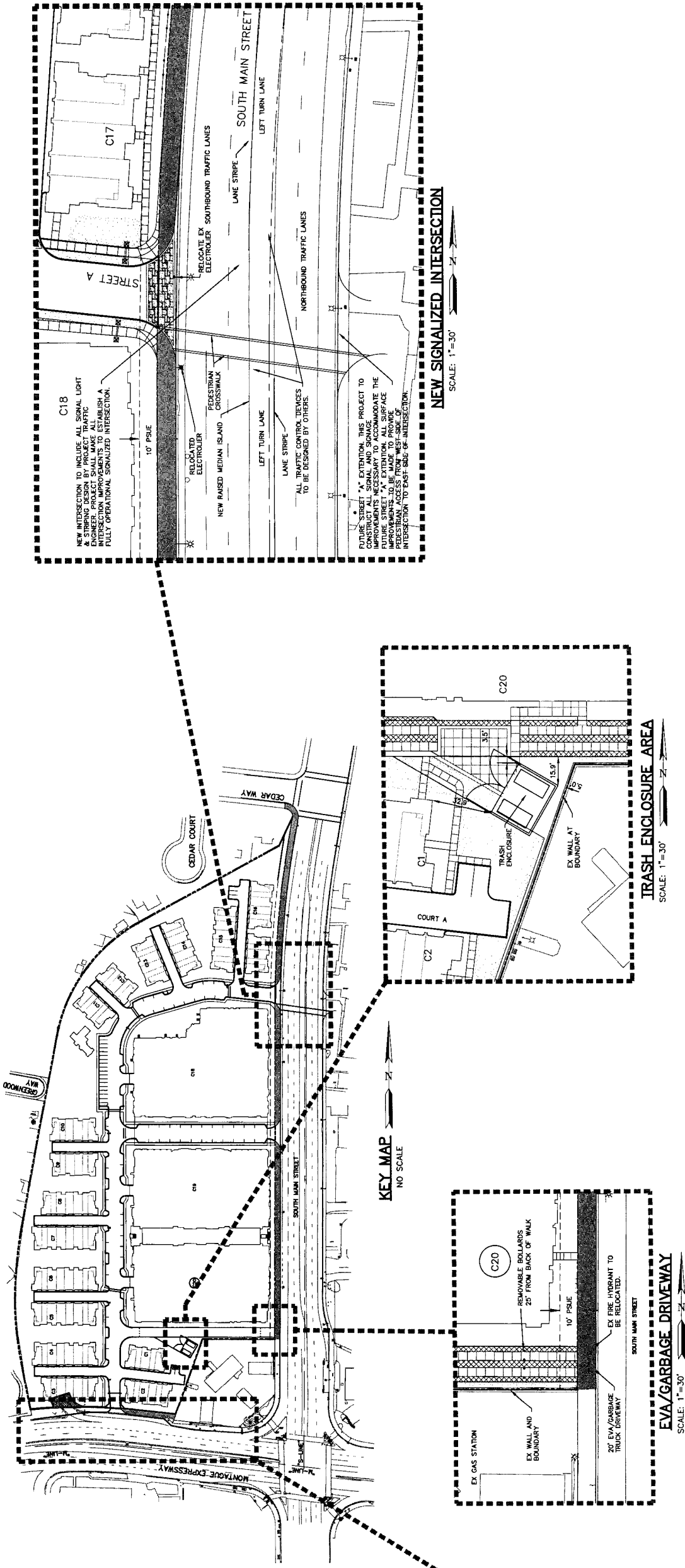
DEMOLITION NOTES:

- ⑦ EXISTING BUILDING TO BE DEMOLISHED
- ⑧ EXISTING TREES TO REMAIN
- ⑨ EXISTING TREES TO BE REMOVED
- ⑩ EXISTING SOUND WALL TO REMAIN
- ⑪ EXISTING DRIVEWAY TO REMAIN/7' UNDERGROUND
- ⑫ EXISTING DRIVEWAY TO BE REMOVED
- ⑬ EXISTING DRIVEWAY TO REMAIN/TO BE MODIFIED
- ⑭ EXISTING CURB AND GUTTER TO BE REPLACED WITH MAIN ENTRANCE DRIVEWAY
- ⑮ EXISTING CURB AND GUTTER TO BE REPLACED WITH EVA
- ⑯ EXISTING UTILITY BOX TO BE REMOVED OR RELOCATED
- ⑰ EXISTING BUS STOP TO REMAIN
- ⑱ EXISTING POWER POLE TO BE RELOCATED
- ⑲ EXISTING WALK TO BE MODIFIED TO MEET ADA STANDARDS
- ⑳ EXISTING DRIVEWAY TO BE REMOVED
- ㉑ EXISTING DRIVEWAY TO BE MODIFIED
- ㉒ EXISTING DRIVEWAY TO BE MODIFIED
- ㉓ EXISTING DRIVEWAY TO BE MODIFIED
- ㉔ EXISTING DRIVEWAY TO BE MODIFIED
- ㉕ EXISTING DRIVEWAY TO BE MODIFIED
- ㉖ EXISTING DRIVEWAY TO BE MODIFIED
- ㉗ EXISTING DRIVEWAY TO BE MODIFIED
- ㉘ EXISTING DRIVEWAY TO BE MODIFIED
- ㉙ EXISTING DRIVEWAY TO BE MODIFIED
- ㉚ EXISTING DRIVEWAY TO BE MODIFIED
- ㉛ EXISTING DRIVEWAY TO BE MODIFIED
- ㉜ EXISTING DRIVEWAY TO BE MODIFIED
- ㉝ EXISTING DRIVEWAY TO BE MODIFIED
- ㉞ EXISTING DRIVEWAY TO BE MODIFIED
- ㉟ EXISTING DRIVEWAY TO BE MODIFIED
- ㊱ EXISTING DRIVEWAY TO BE MODIFIED
- ㊲ EXISTING DRIVEWAY TO BE MODIFIED
- ㊳ EXISTING DRIVEWAY TO BE MODIFIED
- ㊴ EXISTING DRIVEWAY TO BE MODIFIED
- ㊵ EXISTING DRIVEWAY TO BE MODIFIED
- ㊶ EXISTING DRIVEWAY TO BE MODIFIED
- ㊷ EXISTING DRIVEWAY TO BE MODIFIED
- ㊸ EXISTING DRIVEWAY TO BE MODIFIED
- ㊹ EXISTING DRIVEWAY TO BE MODIFIED
- ㊺ EXISTING DRIVEWAY TO BE MODIFIED
- ㊻ EXISTING DRIVEWAY TO BE MODIFIED
- ㊼ EXISTING DRIVEWAY TO BE MODIFIED
- ㊽ EXISTING DRIVEWAY TO BE MODIFIED
- ㊾ EXISTING DRIVEWAY TO BE MODIFIED
- ㊿ EXISTING DRIVEWAY TO BE MODIFIED





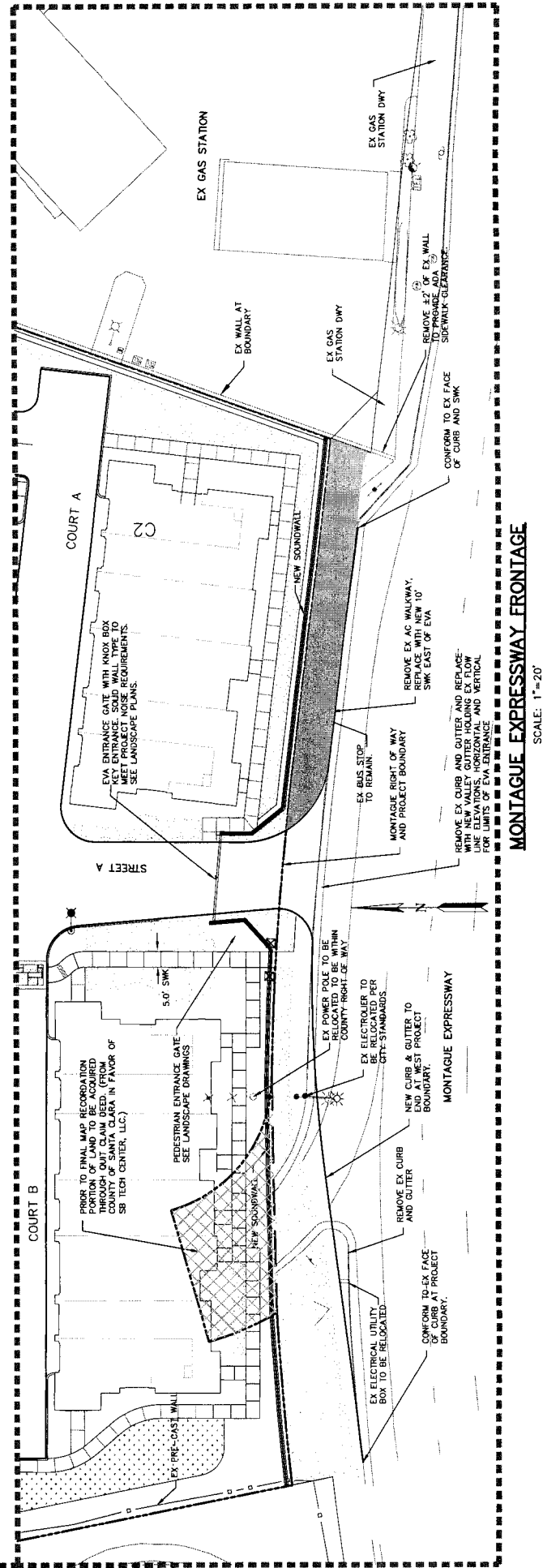


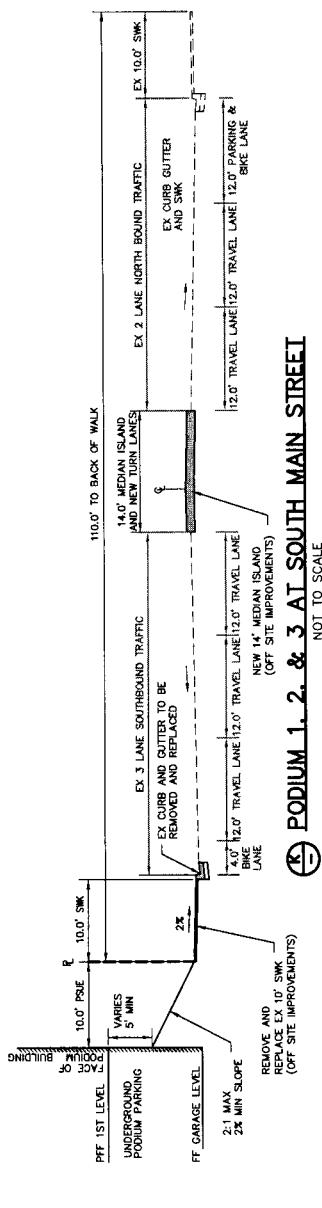
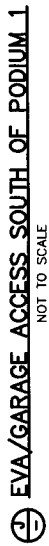
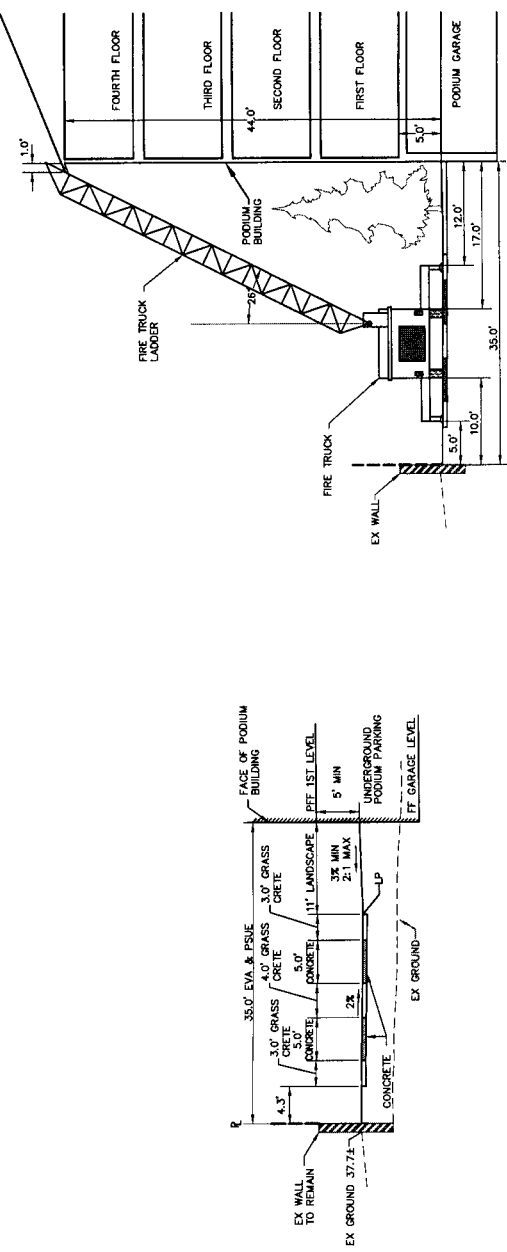
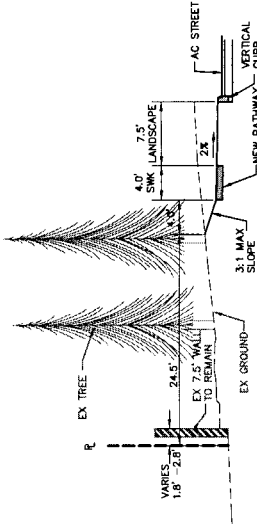
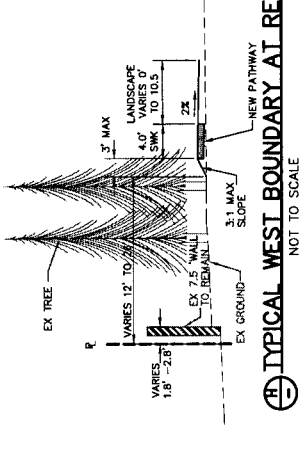
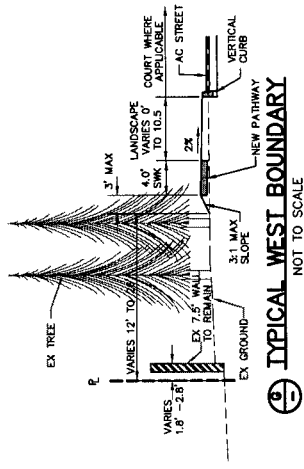
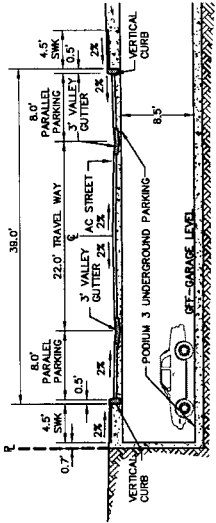
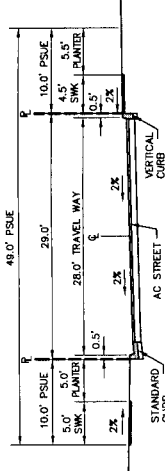
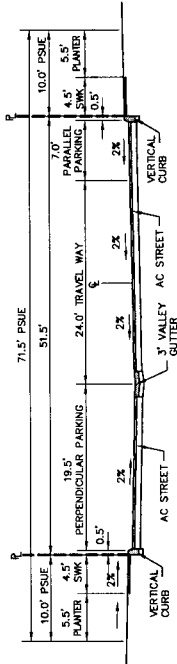
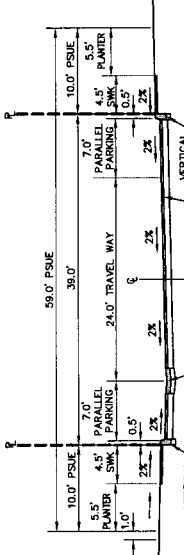
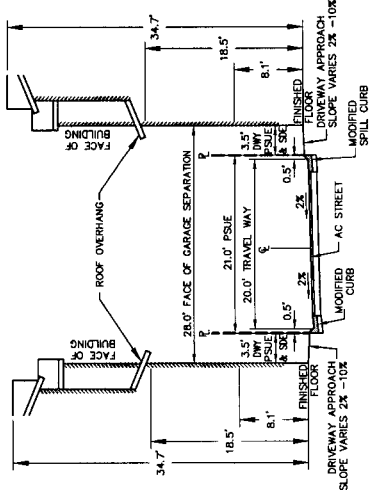
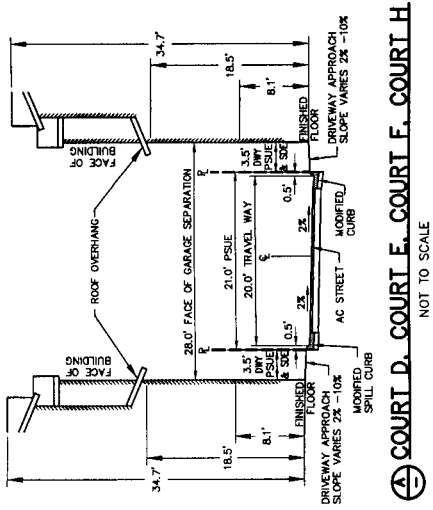
[illegible]

NOTES:

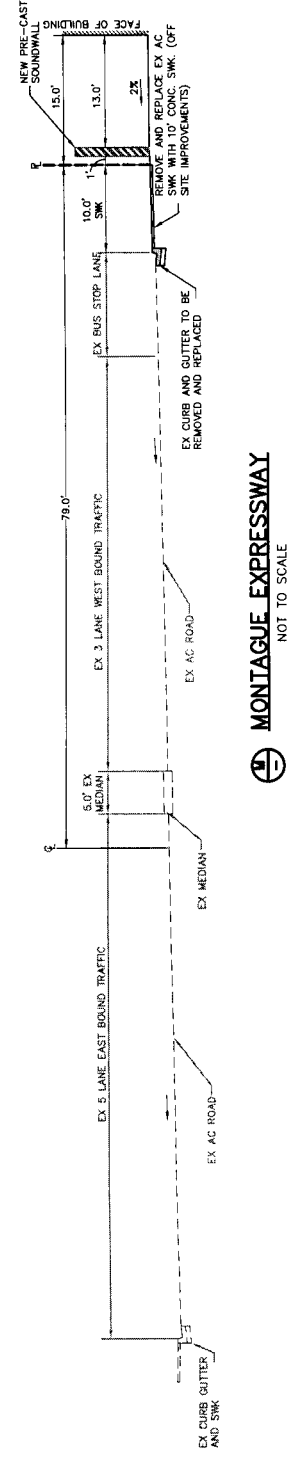
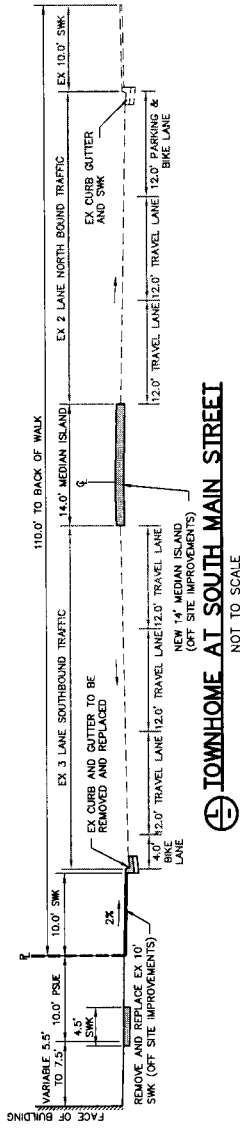
ALL IMPROVEMENTS ALONG MAIN STREET ARE TO BE DONE IN ACCORDANCE WITH THE CITY OF MILPITAS SOUTH MAIN STREET IMPROVEMENT STUDY.

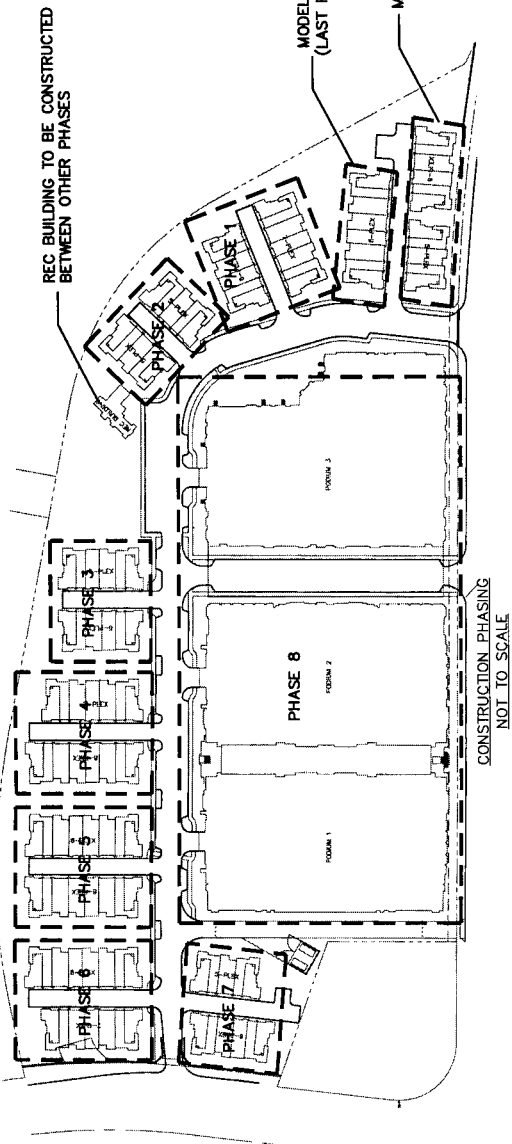
- RAISED MEDIAN ISLAND WITH LANDSCAPING & IRRIGATION. HORIZONTAL AND FINAL ALIGNMENT TO BE COMPLETED BY CITY OF MILPITAS.
- NEW STREET LIGHTS EAST SIDE OF SOUTH MAIN ST.
- TYPE II SLURRY SEAL ENTIRE WIDTH OF SOUTH MAIN STREET
- APPROXIMATELY "5"-LINE STATION 4+00 TO CEDAR WAY.



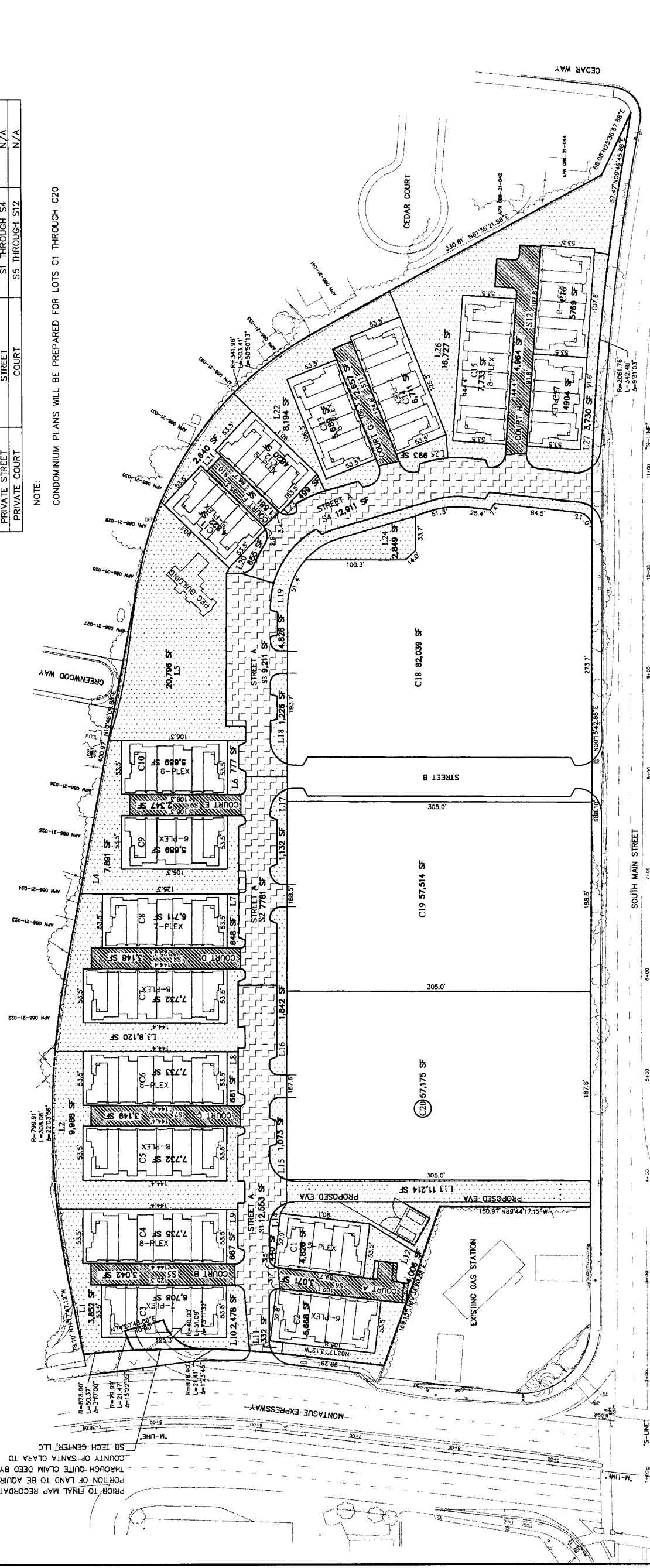


ALL IMPROVEMENTS ALONG MAIN STREET ARE TO BE DONE IN ACCORDANCE WITH THE CITY OF MILPITAS SOUTH MAIN STREET PLAN LINE STUDY.





PRIOR TO FINAL MAP RECORDED  
THROUGH QUIT CLAIM DEED BY  
COUNTY OF SANTA CLARA TO  
SB TECH CENTER, LLC



NOTE:  
CONDOMINIUM PLANS WILL BE PREPARED FOR LOTS C1 THROUGH C20

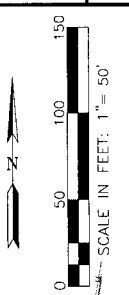
LAND USE SUMMARY TABLE			
AREA	DESCRIPTION	LOT NO.	NO. OF UNITS
TOWNHOMES	5-PLEX CONDOMINIUM	C1	5
	6-PLEX CONDOMINIUM	C2	6
	7-PLEX CONDOMINIUM	C3	7
	8-PLEX CONDOMINIUM	C4	8
	8-PLEX CONDOMINIUM	C5	8
	8-PLEX CONDOMINIUM	C6	8
	8-PLEX CONDOMINIUM	C7	8
	7-PLEX CONDOMINIUM	C8	7
	6-PLEX CONDOMINIUM	C9	6
	6-PLEX CONDOMINIUM	C10	6
	5-PLEX CONDOMINIUM	C11	5
	5-PLEX CONDOMINIUM	C12	5
	6-PLEX CONDOMINIUM	C13	6
	7-PLEX CONDOMINIUM	C14	7
	8-PLEX CONDOMINIUM	C15	8
	6-PLEX CONDOMINIUM	C16	11
	5-PLEX CONDOMINIUM	C17	11
PODIUM	N/A	C18	91
	N/A	C19	83
	N/A	C20	83
COMMON OPEN SPACE	N/A	L1 THROUGH L27	N/A
PRIVATE STREET	STREET	S1 THROUGH S4	N/A
PRIVATE COURT	COURT	S5 THROUGH S12	N/A

Ruggeri  
Jensen & Associates  
11000 E. 15th Avenue, Suite 100  
Broomfield, CO 80020  
PHONE: (303) 440-0300 • FAX: (303) 440-0302

S-ZONE PERMIT AMENDMENT  
ESTRELLA  
LAND USES/LOTING  
MILPITAS, CALIFORNIA

DATE	MR.	REVISIONS
MAR. 2007		

SHEET  
C-5  
JOB NO. 062005



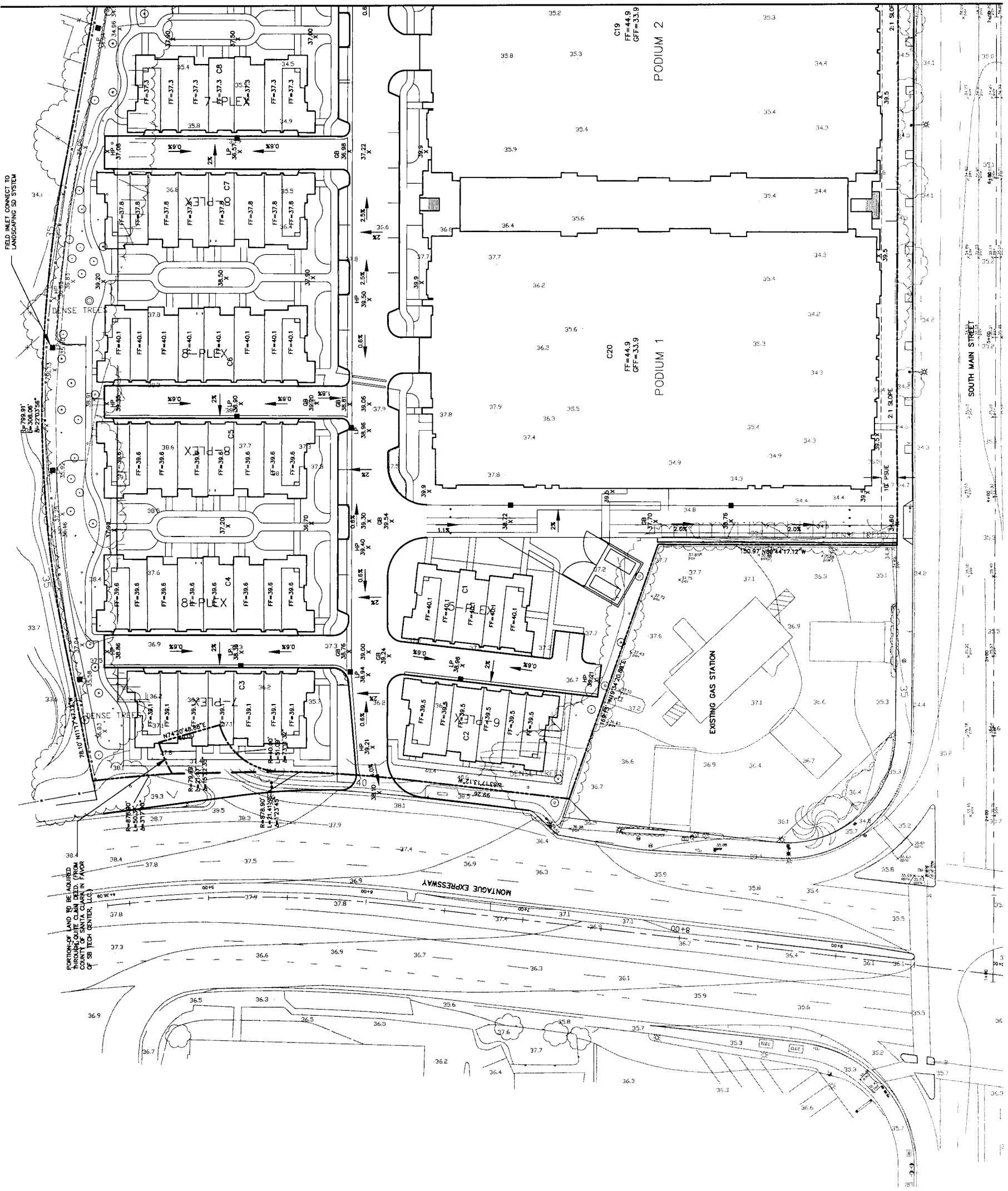
DATE	BY	CHK	REVISIONS
MAR. 2007			

S-ZONE PERMIT AMENDMENT  
ESTRELLA  
CONCEPTUAL GRADING PLAN  
MILPITAS, CALIFORNIA

Ruggeri  
Azar & Associates  
PROJECT ENGINEER  
8055 CAMINO ARROYO • GILROY, CA 95020  
PHONE: (408) 848-0300 • FAX: (408) 848-0302



MATCHLINE-SEE SHEET C-7





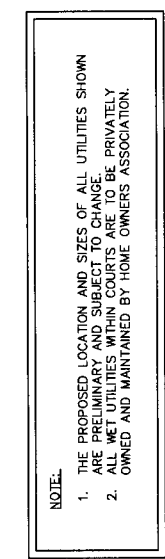




## TYPICAL STORM DRAIN AND SEWER CONNECTIONS



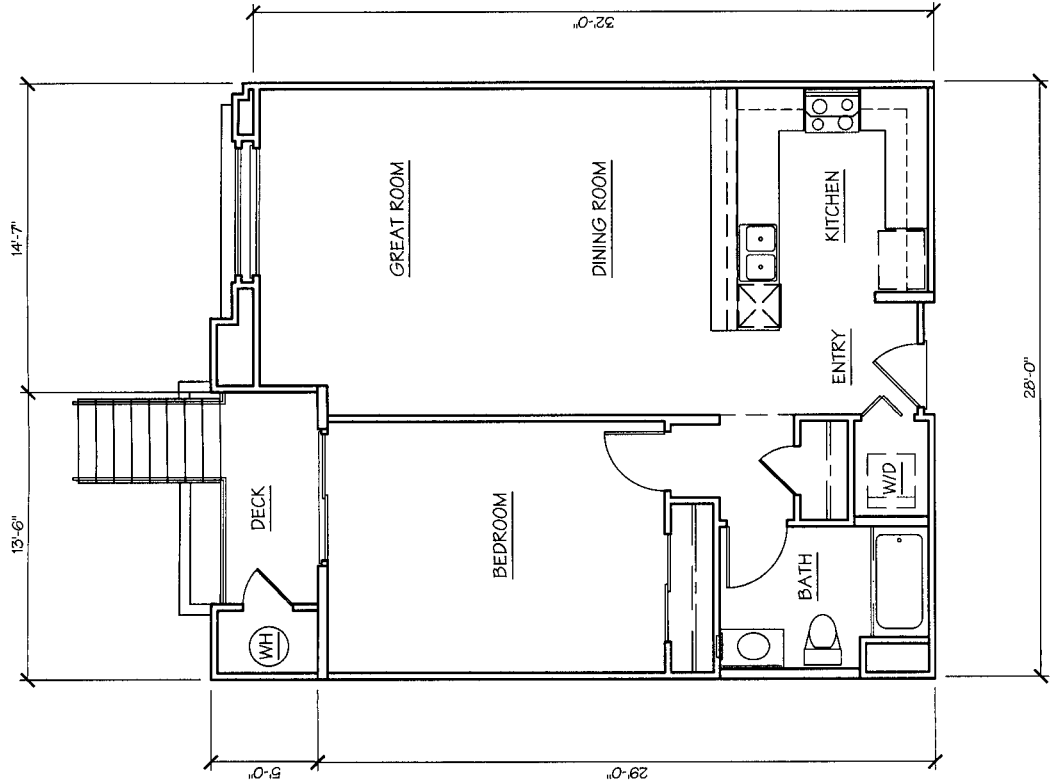
SEWER	PRIVATE
STORM	PRIVATE
WATER	PRIVATE
WATER	PUBLIC
WATER (STREET A)	
WATER (EVA)	PUBLIC



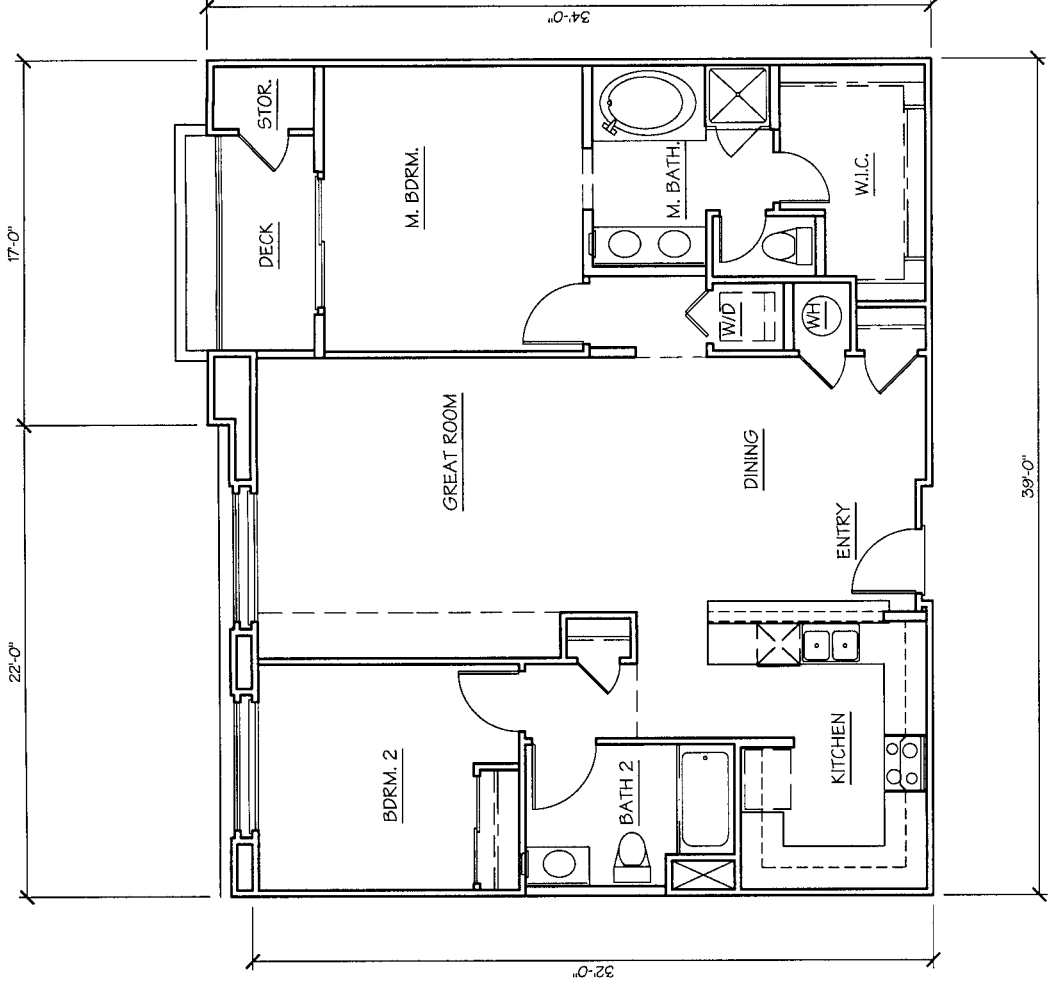
### DETAIL B

TYPICAL WATER METER LOCATION

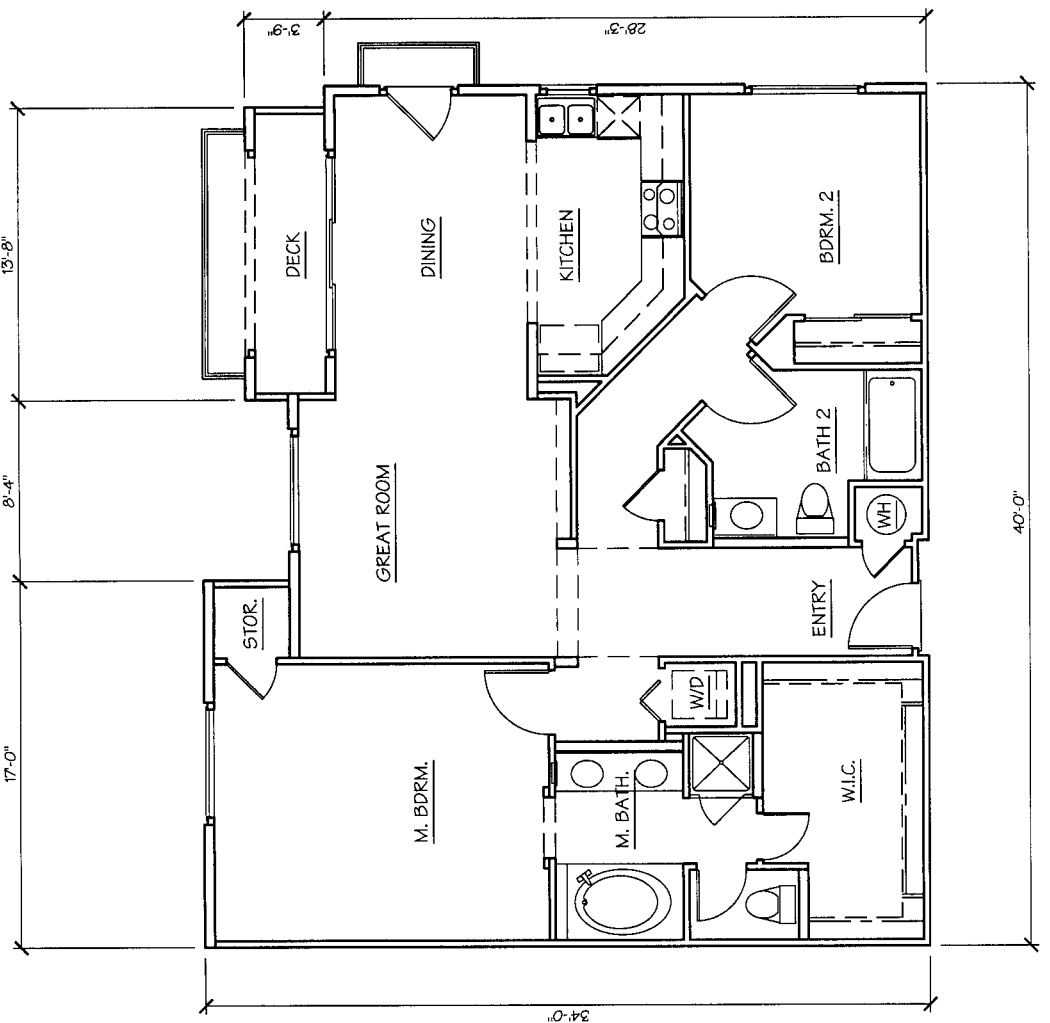




UNIT 1 FLOOR PLAN  
ONE BEDROOM  
856 SQFT. GROSS  
818 SQFT. NET



UNIT 2 FLOOR PLAN  
TWO BEDROOMS  
1,205 SQFT. GROSS  
1,161 SQFT. NET



UNIT 3 FLOOR PLAN  
TWO BEDROOMS  
1,240 SQFT. GROSS  
1,186 SQFT. NET

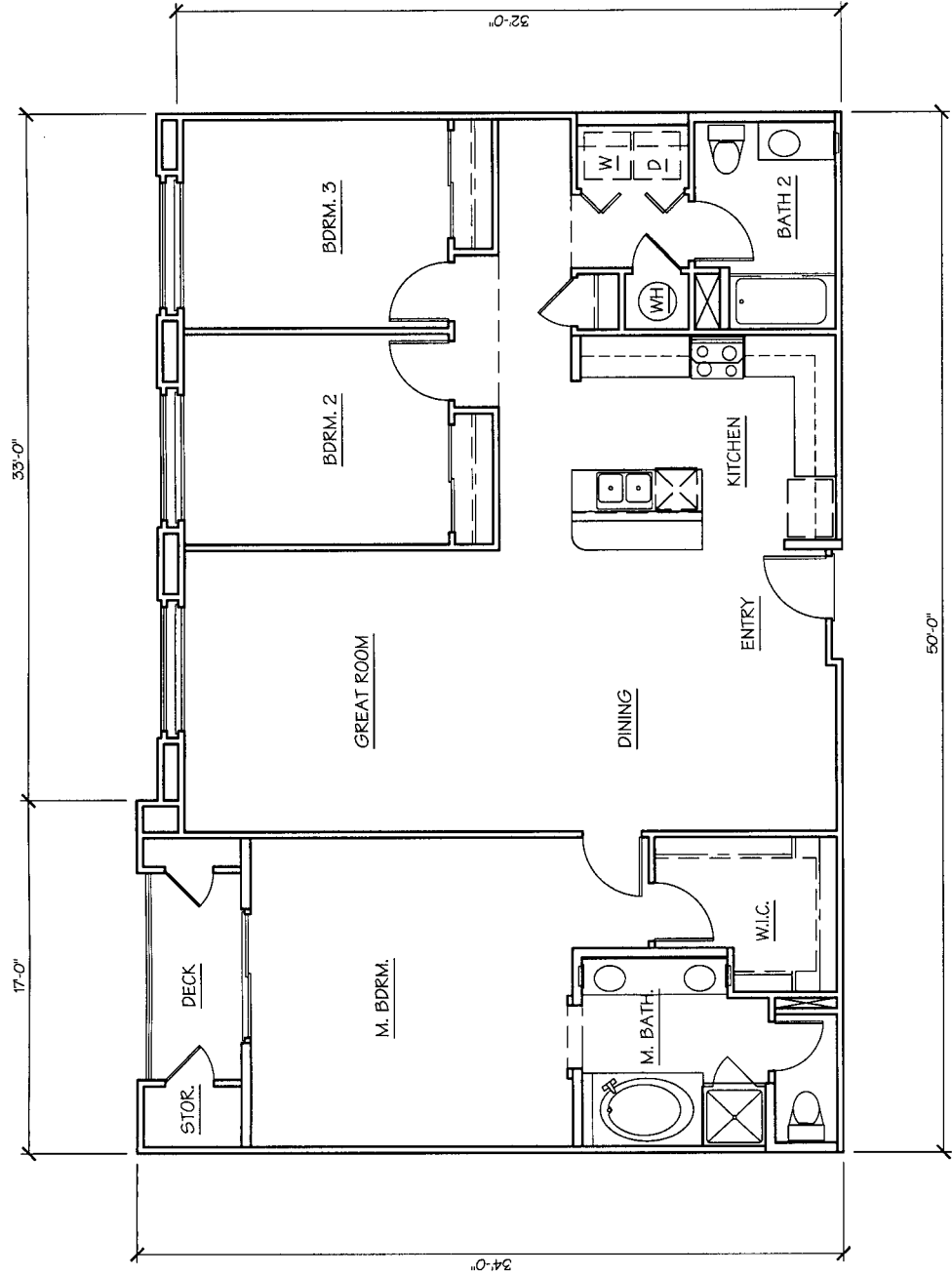
BUILDING A, B & C  
UNIT PLANS - FLAT



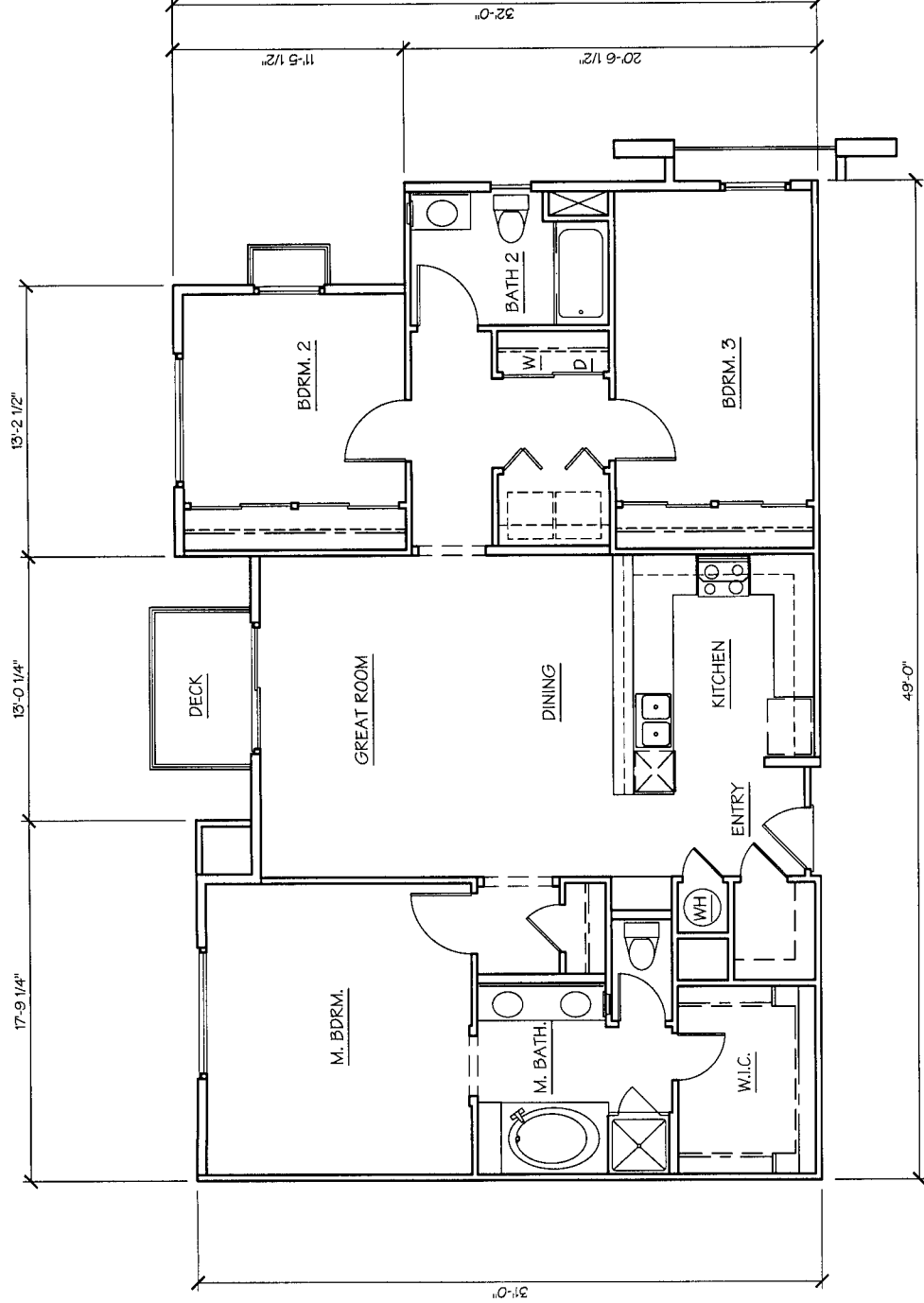
5865 Owens Drive  
Picoorion, CA 94588  
925.251.7200  
925.251.7201 Fax

A-1



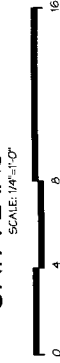


UNIT 4 FLOOR PLAN  
THREE BEDROOMS  
1,552 SQFT. GROSS  
1,501 SQFT. NET



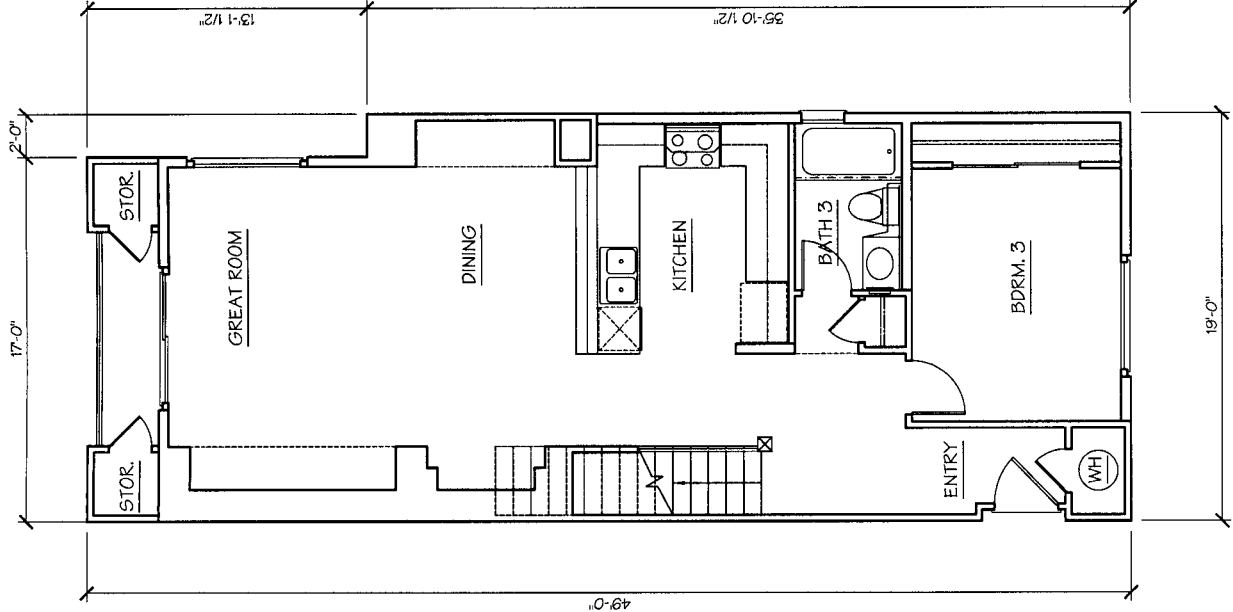
UNIT 5 FLOOR PLAN  
THREE BEDROOMS  
1,434 SQFT. GROSS  
1,372 SQFT. NET

BUILDING A, B & C  
UNIT PLANS - FLAT



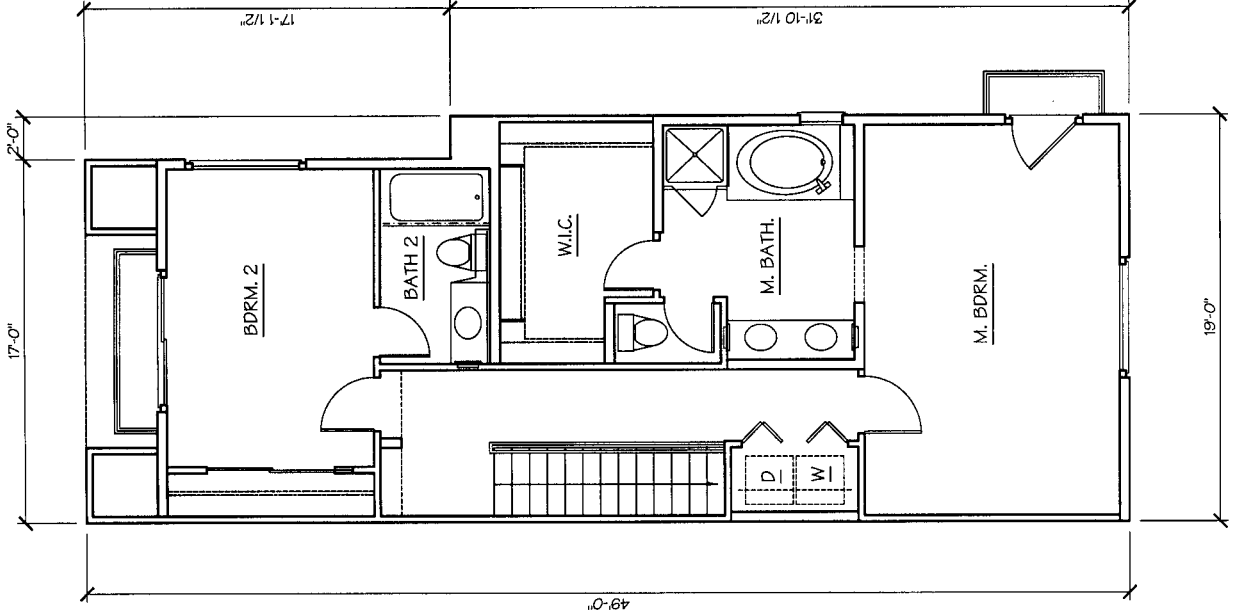
DAHLIN GROUP  
ARCHITECTS

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

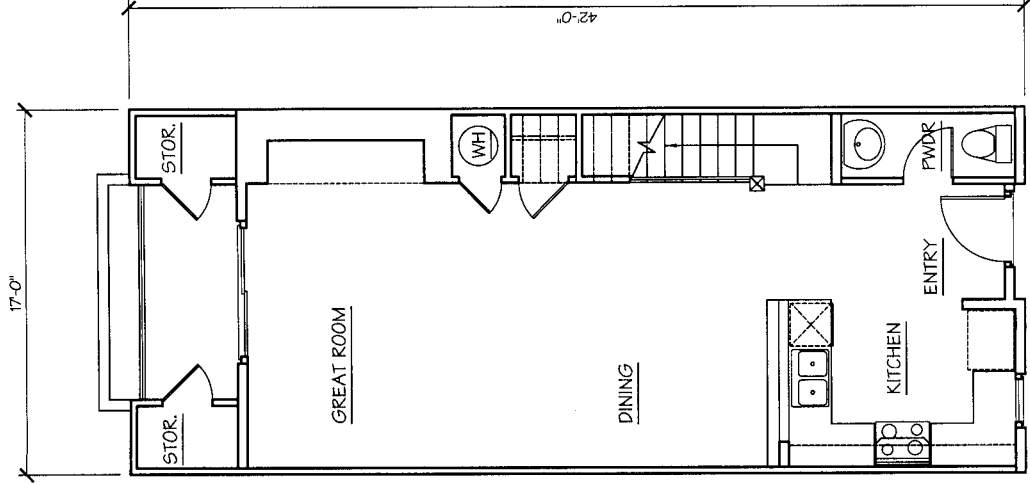


1ST FLOOR PLAN

TOWNHOME 1  
THREE BEDROOMS  
1,649 SQFT. GROSS  
1,511 SQFT. NET

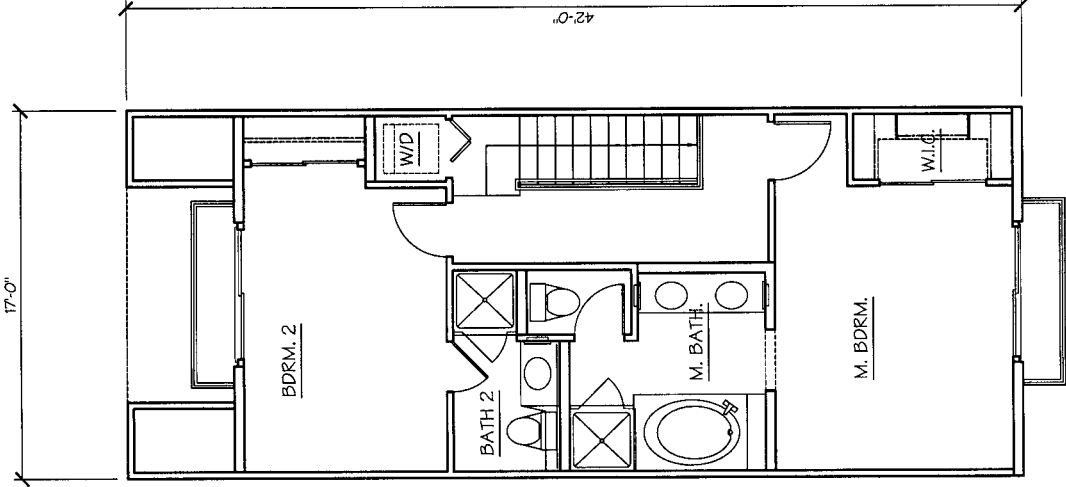


2ND FLOOR PLAN



1ST FLOOR PLAN

TOWNHOME 2  
TWO BEDROOMS  
1,227 SQFT. GROSS  
1,140 SQFT. NET



2ND FLOOR PLAN

BUILDING A, B & C  
UNIT PLANS - TOWNHOME  
SCALE: 1/4"=1'-0"



DAHLIN GROUP

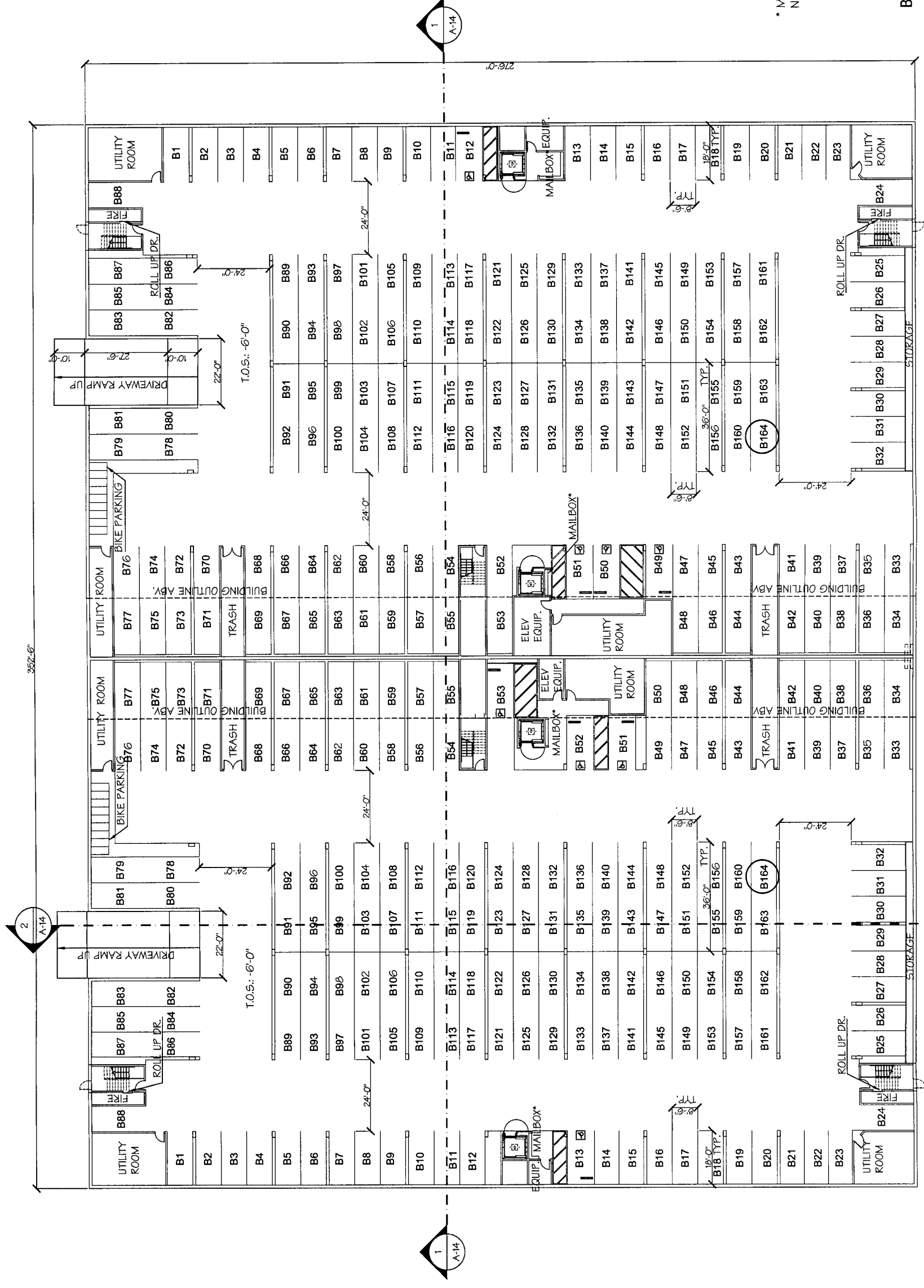
PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

ESTRELLA      MILPITAS, CALIFORNIA

WARMINGTON HOMES CALIFORNIA

5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

A-3

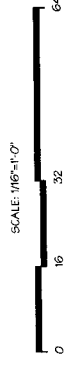


BLDG. A  
PARKING PROVIDED: 164 SPACES  
BIKE PARKING PROVIDED: 9 SPACES

**BLDG. B**  
**PARKING PROVIDED:** 164 SPACES  
**BIKE PARKING PROVIDED:** 9 SPACES

\* MAILBOX LOCATIONS WILL BE REVISED AS NECESSARY PER USPS REQUIREMENTS.

## BUILDING A&B GARAGE PLAN



**ESTRELLA**  
MILPITAS, CALIFORNIA

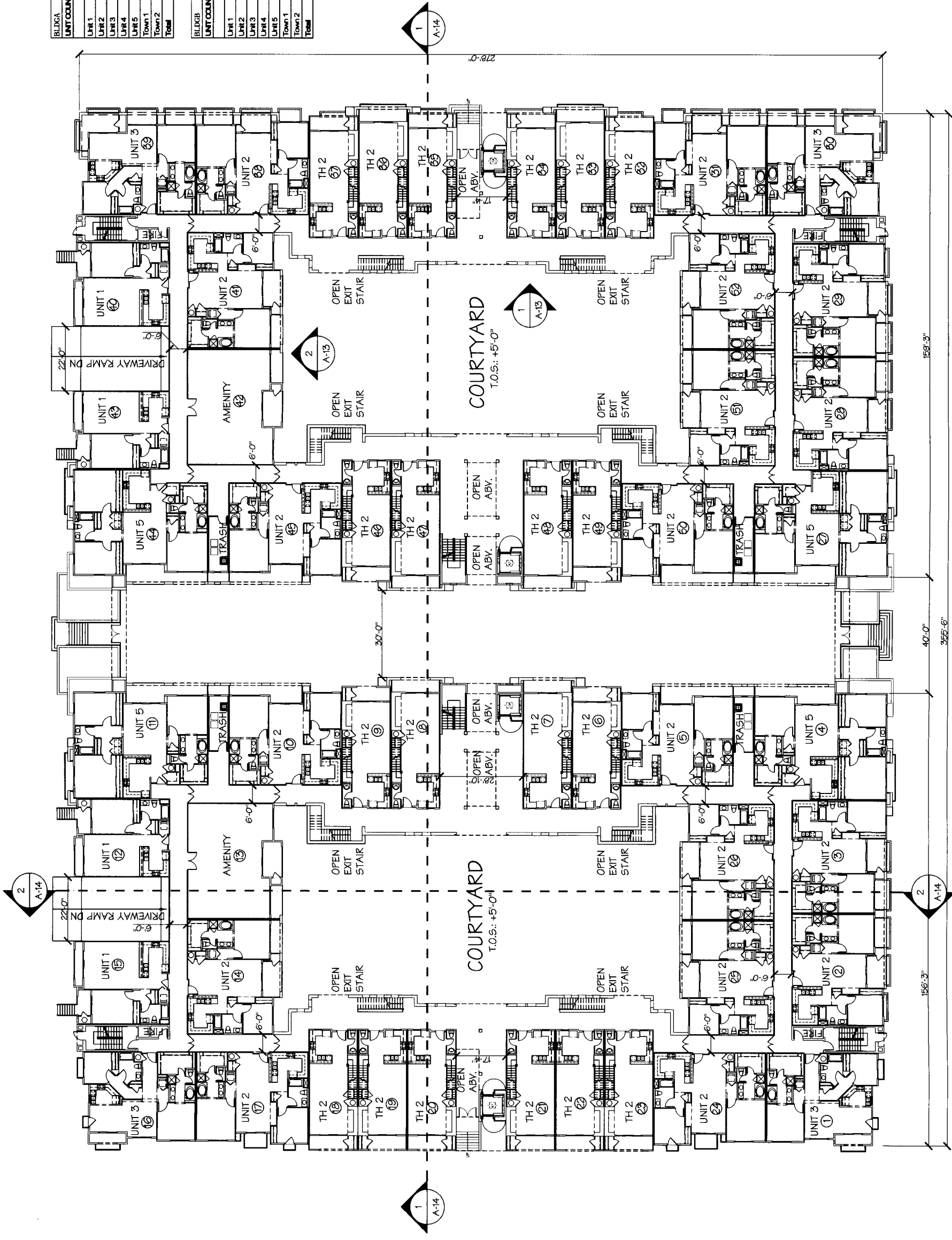
WARMINGTON HOMES CALIFORNIA

DAHLIN GROUP

5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

**A-4**



BLDGA	UNIT COUNT	Bedroom Count	Unit Gross Area (sqft)	Unit Net Area (sqft)	Unit Count (Unit)
UNIT 1	1	1	856	818	2
UNIT 2	2	2	1,205	1,161	45
UNIT 3	2	2	1,240	1,186	8
UNIT 4	3	2	1,552	1,501	0
UNIT 5	3	2	1,434	1,372	8
Town 1	3	3	1,649	1,511	0
Town 2	2	2 1/2	1,227	1,140	20
Total					83

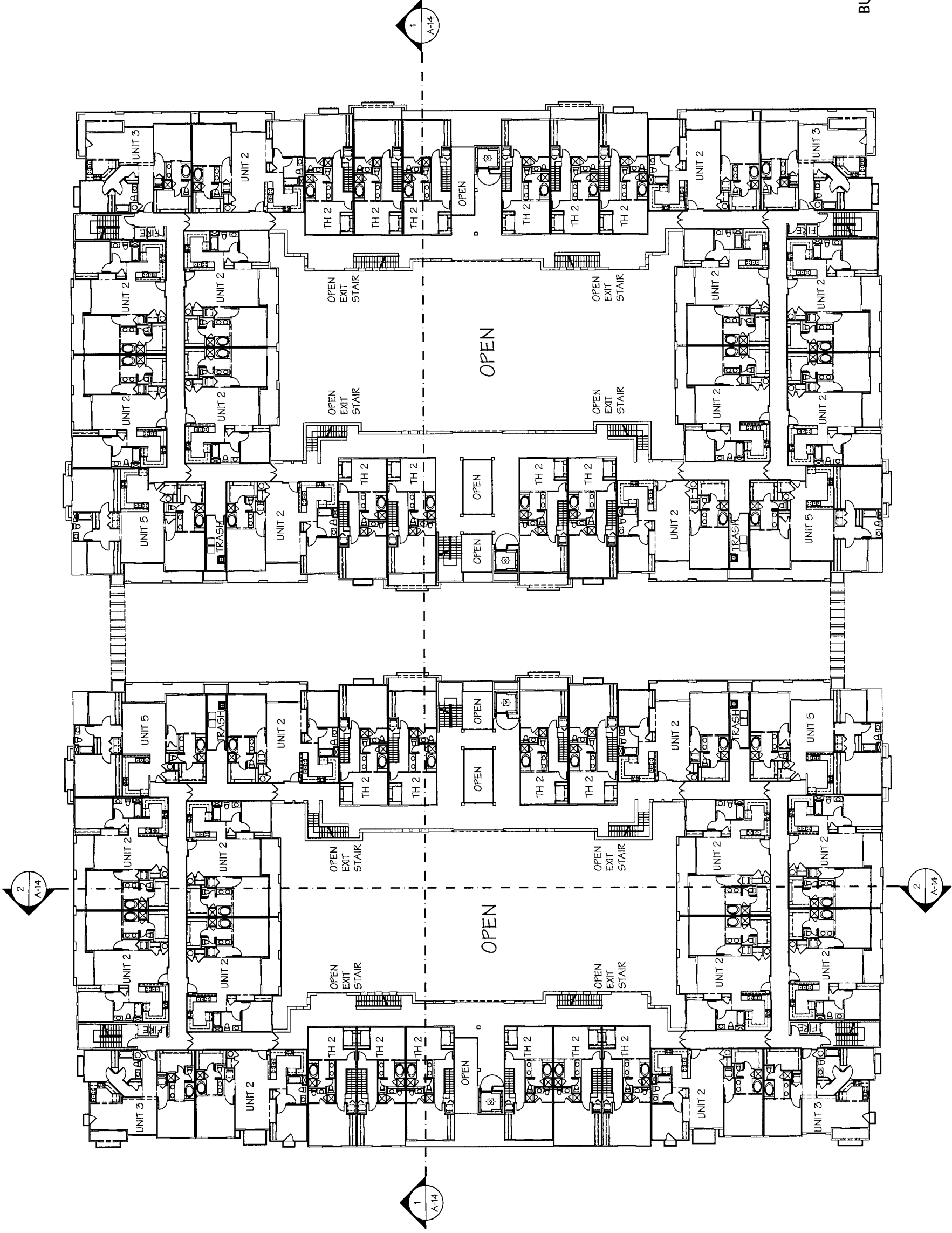
BLDGB	UNIT COUNT	Bedroom Count	Unit Gross Area (sqft)	Unit Net Area (sqft)	Unit Count (Unit)
UNIT 1	1	1	856	818	2
UNIT 2	2	2	1,205	1,161	45
UNIT 3	2	2	1,240	1,186	8
UNIT 4	3	2	1,552	1,501	0
UNIT 5	3	2	1,434	1,372	8
Town 1	3	3	1,649	1,511	0
Town 2	2	2 1/2	1,227	1,140	20
Total					83

BUILDING A&B 1ST FLOOR PLAN

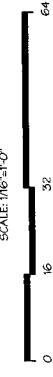


DAHLIN GROUP

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007



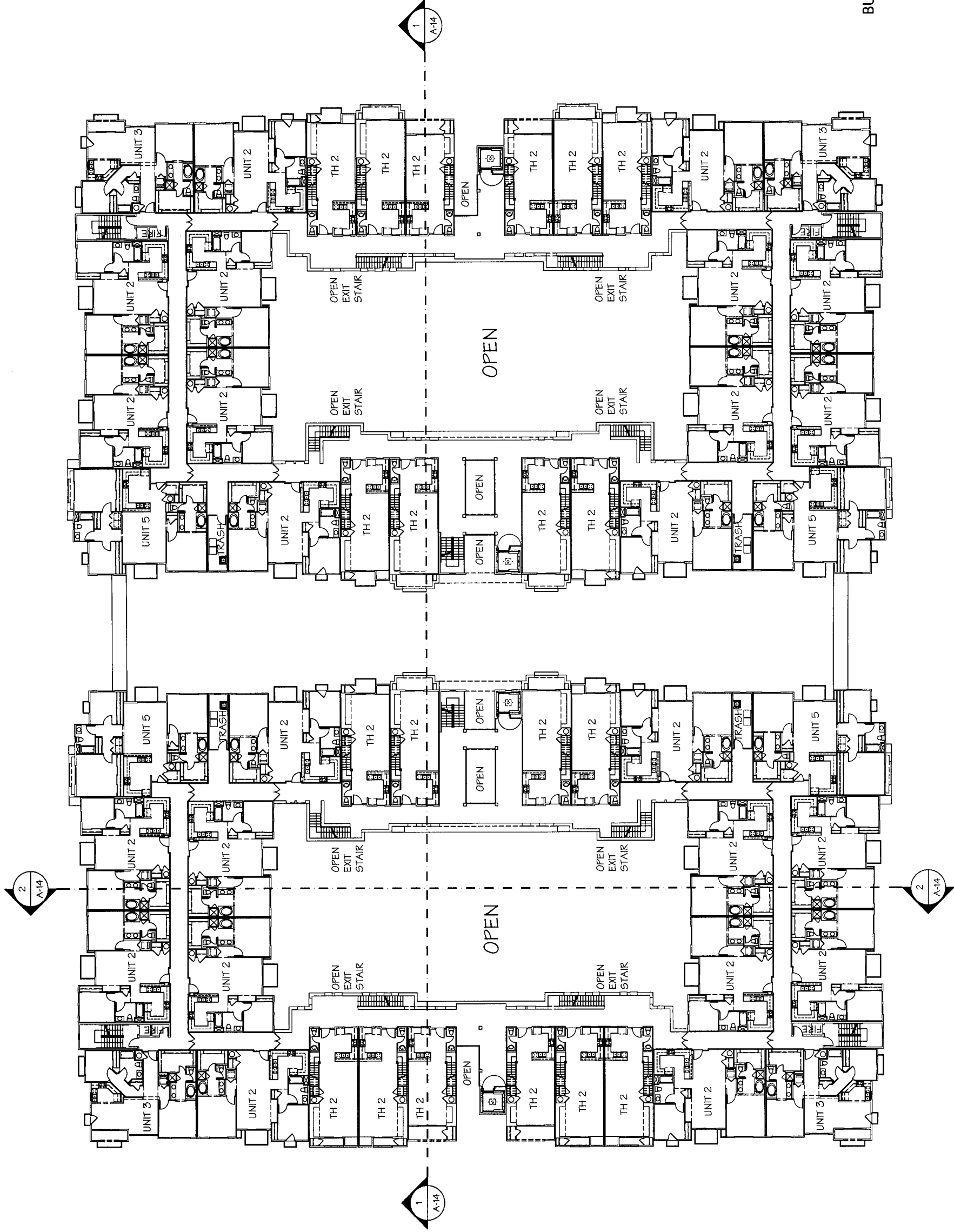
BUILDING A&B 2ND FLOOR PLAN



**DAHLIN GROUP**  
ARCHITECTS

PROJECT NO.: 400.007  
DATE: MAR. 8TH, 2007

**ESTRELLA**      **MILPITAS, CALIFORNIA**  
**WARMINGTON HOMES CALIFORNIA**



BUILDING A&B 3RD FLOOR PLAN

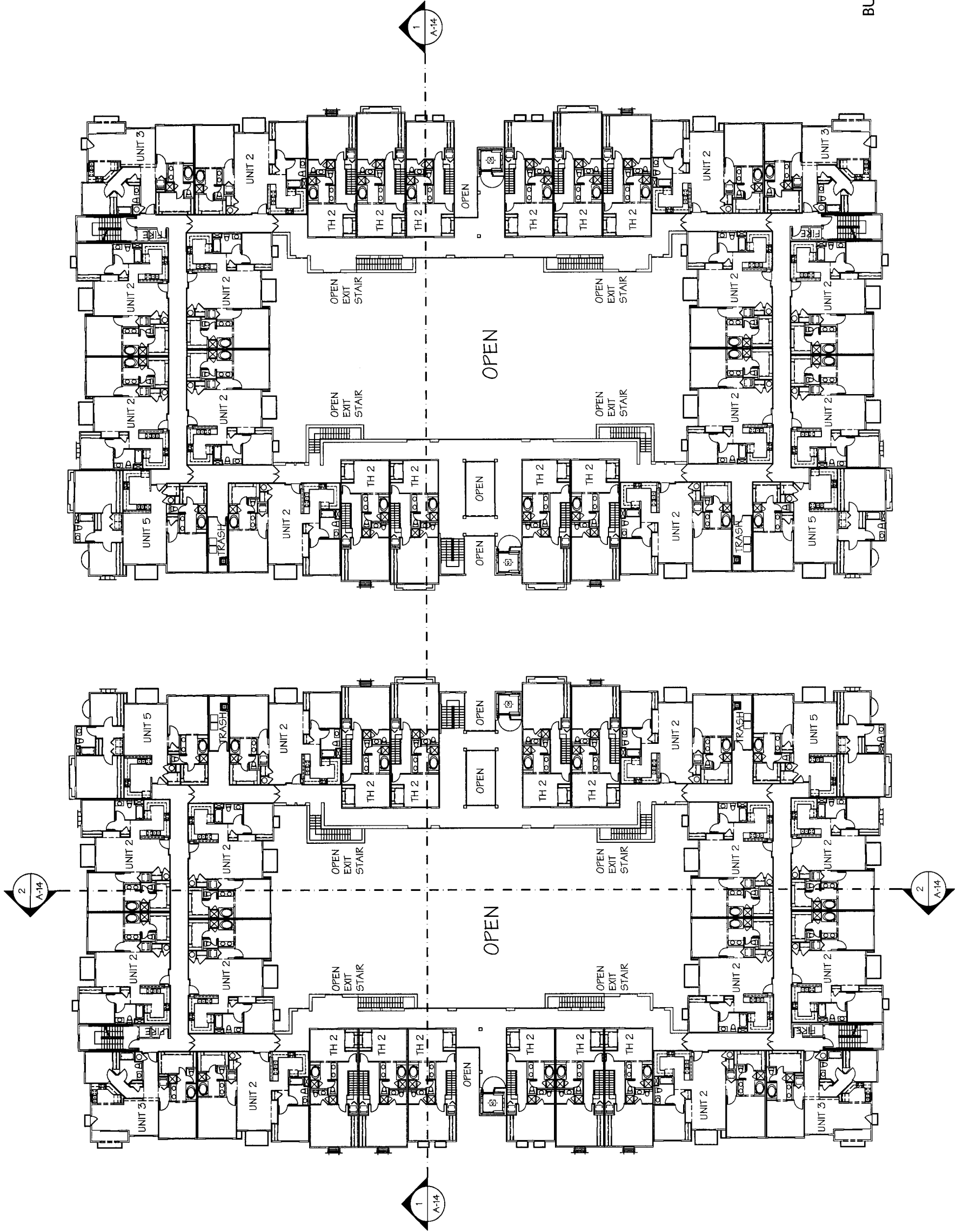
SCALE: 1/16"=1'-0"



NORTH

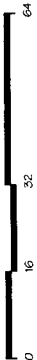
DAHLIN GROUP

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007



BUILDING A&B 4TH FLOOR PLAN

SCALE: 1/16"=1'-0"



NORTH

DAHLIN GROUP

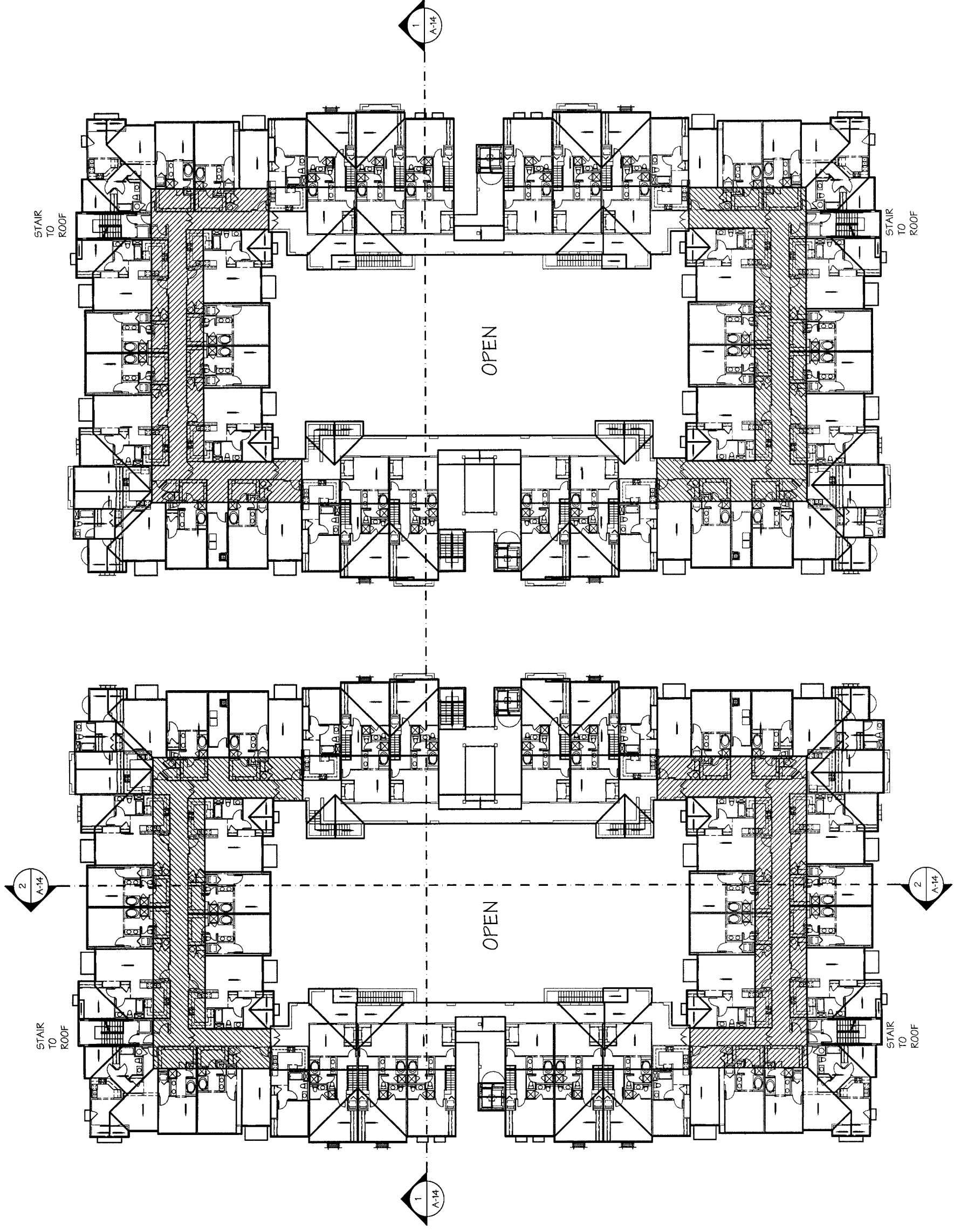
PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

ESTRELLA MILPITAS, CALIFORNIA

WARMINGTON HOMES CALIFORNIA

5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

A-8



BUILDING A&B ROOF PLAN

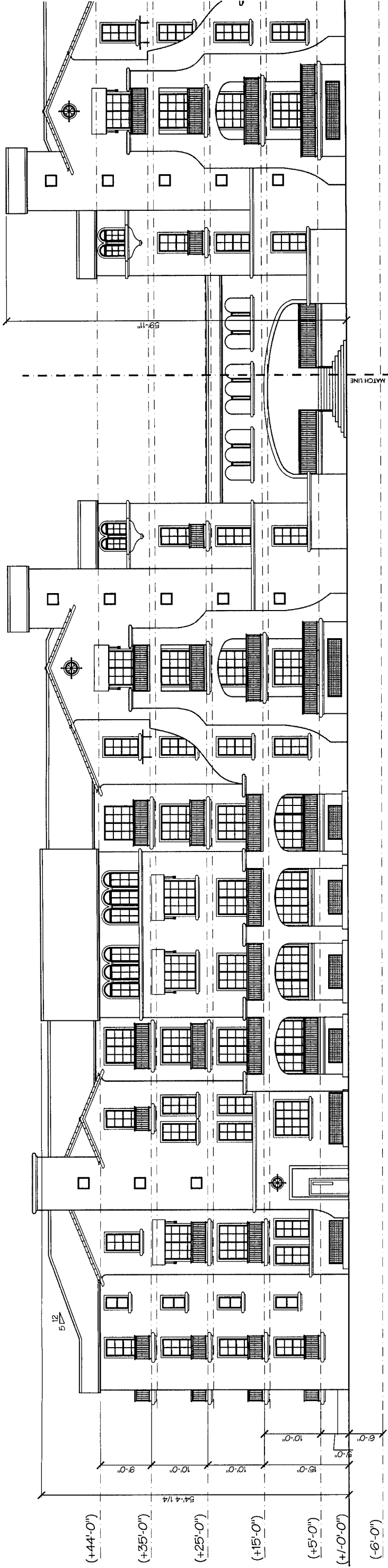
SCALE: 1/8"=1'-0"  
0 16 32 64



DAHILIN GROUP  
ARCHITECTS

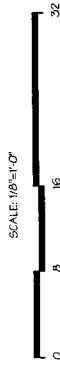
PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007





MAIN STREET ELEVATION

BUILDING A&B ELEVATIONS



DAHLIN GROUP

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

ESTRELLA MILPITAS, CALIFORNIA

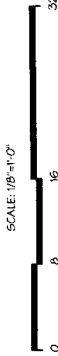
WARMINGTON HOMES CALIFORNIA

5865 Owens Drive  
Pleasanton, CA 94568  
925.251.7200  
925.251.7201 Fax

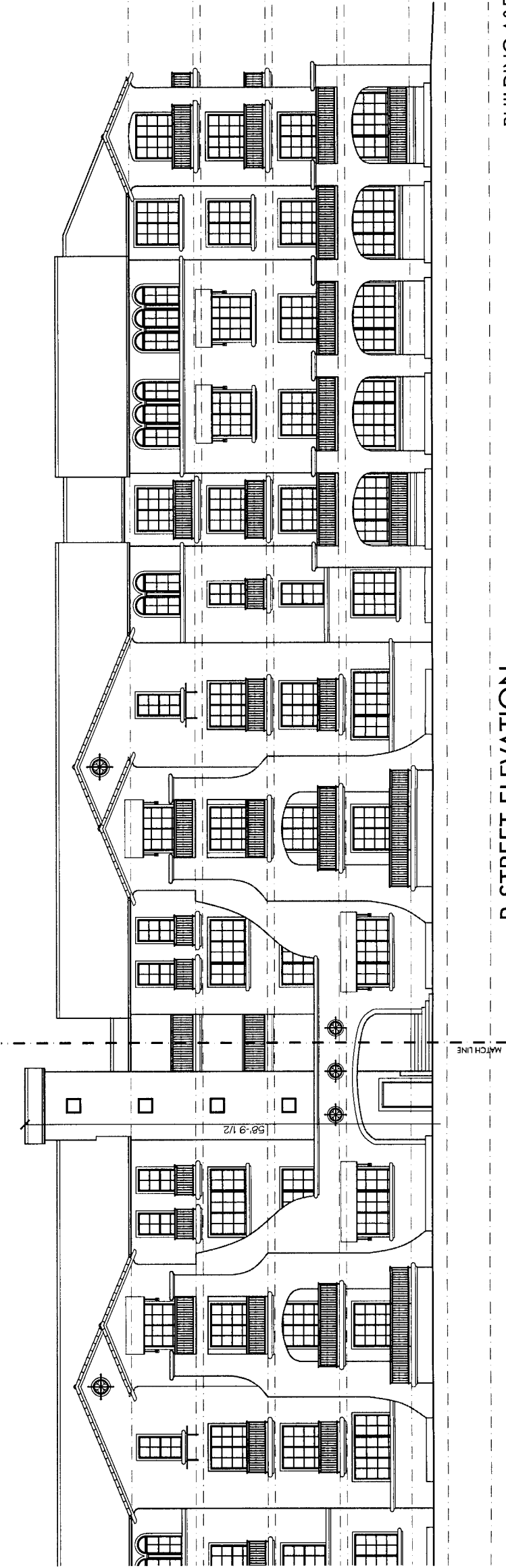
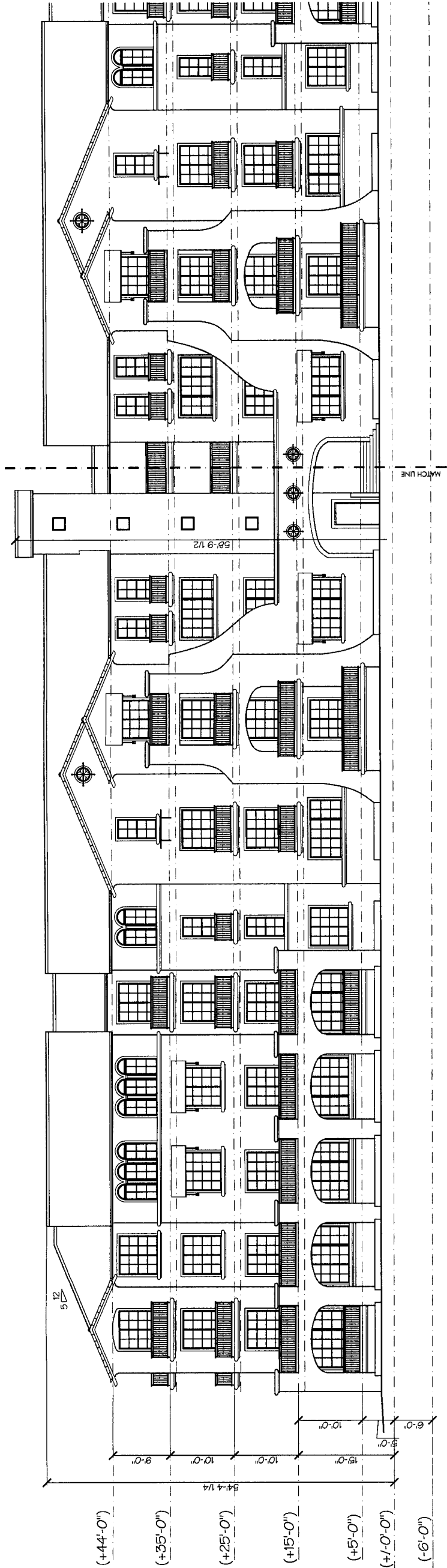
A-10

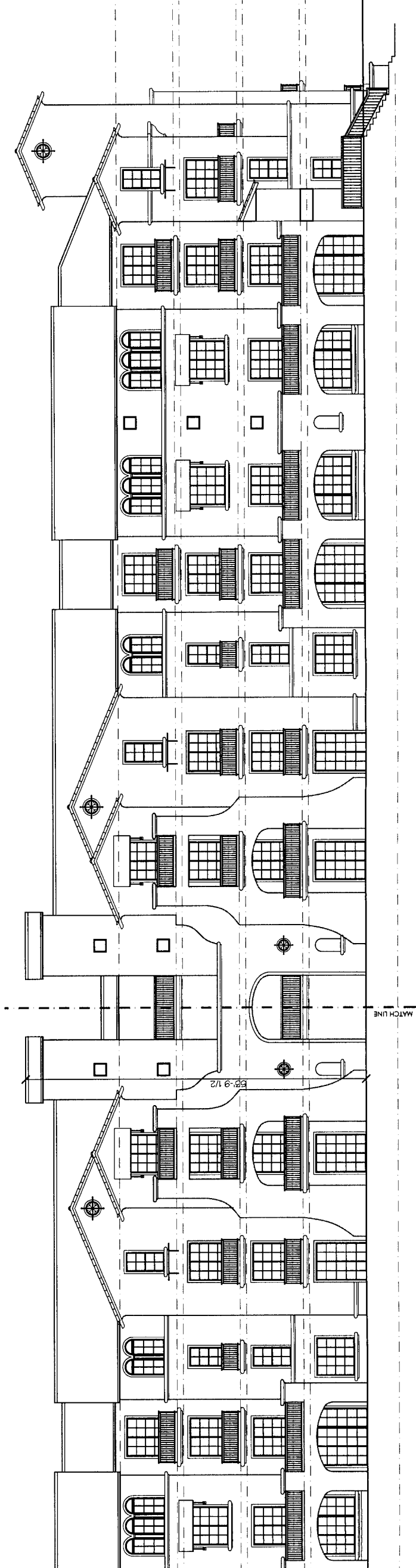
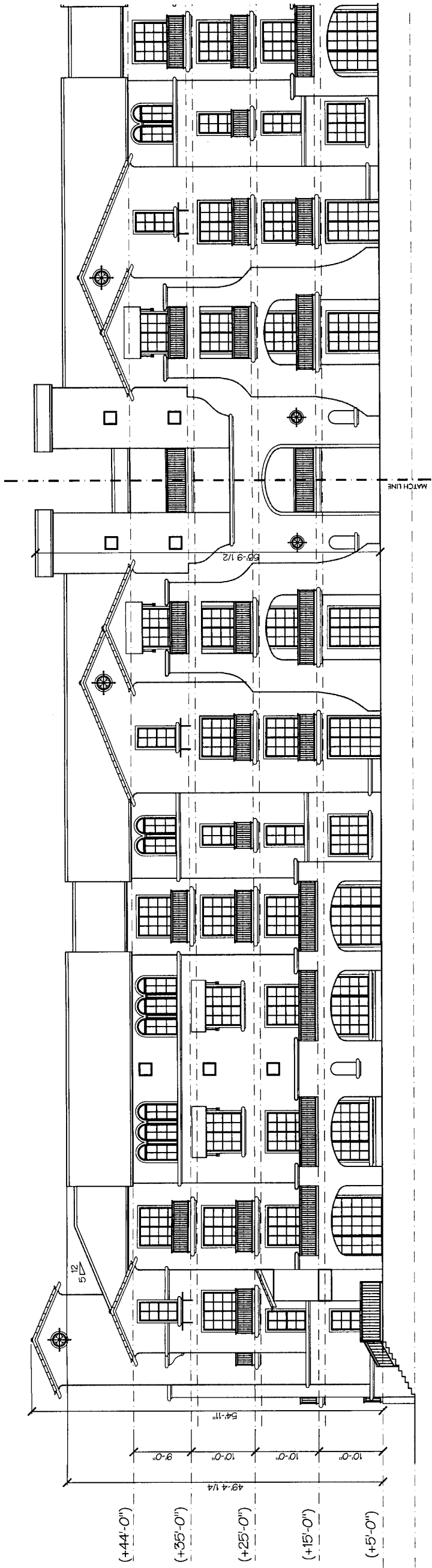


BUILDING A&B ELEVATIONS



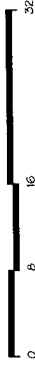
B STREET ELEVATION





PASEO ELEVATION

BUILDING A&B  
COURTYARD ELEVATIONS  
SCALE: 1/8"=1'-0"



DAHLIN GROUP

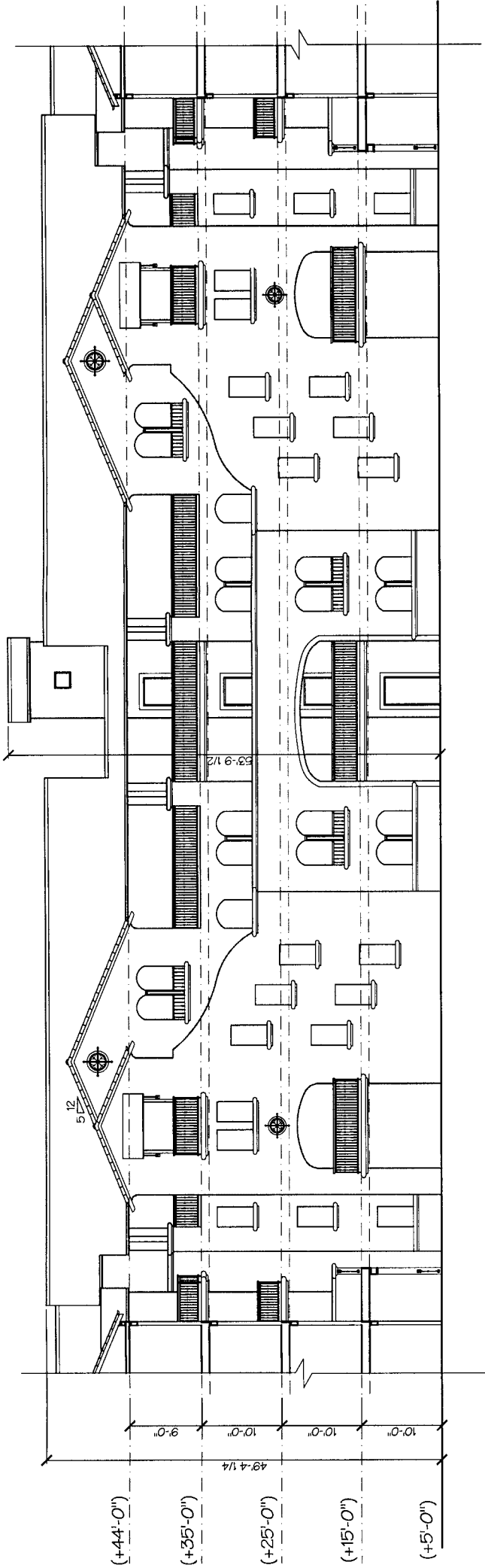
PROJECT NO. - 400.007  
DATE: MAR. 8TH, 2007

ESTRELLA MILPITAS, CALIFORNIA

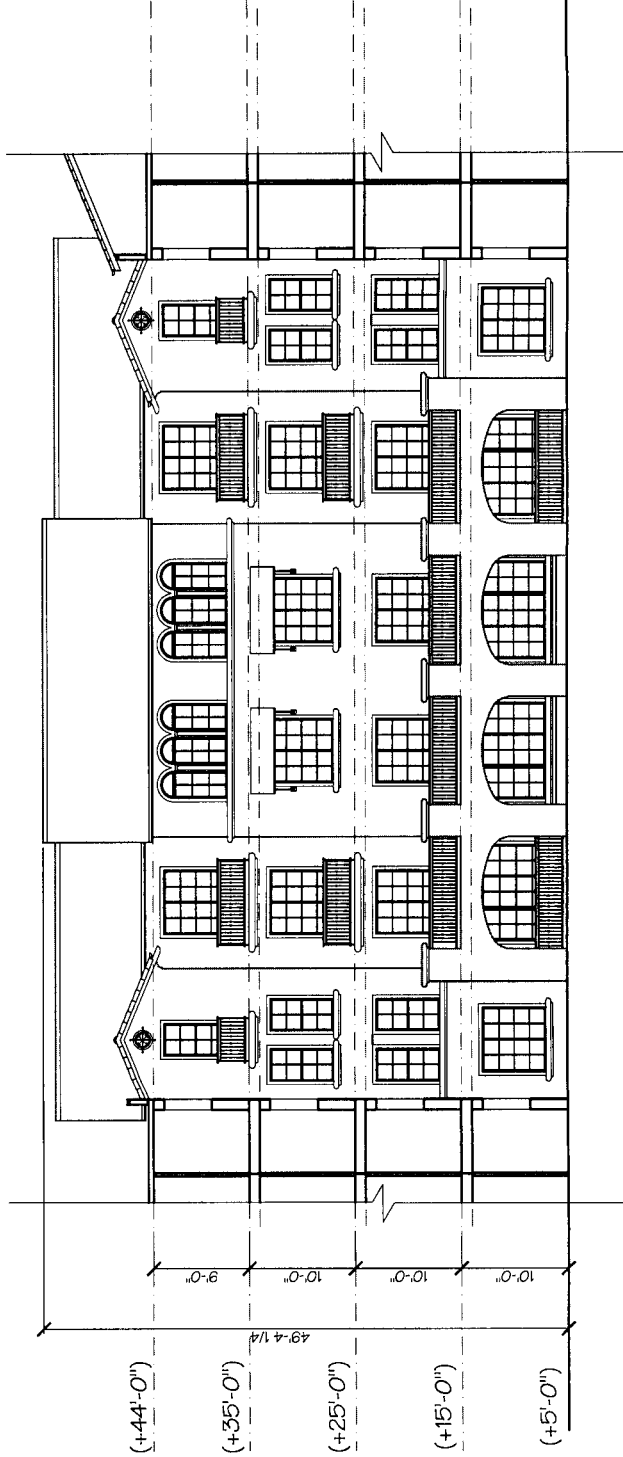
WARMINGTON HOMES CALIFORNIA

5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

A-12

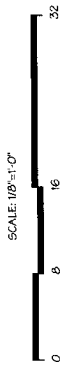


COURTYARD ELEVATION - 1



COURTYARD ELEVATION - 2

BUILDING A&B  
COURTYARD ELEVATIONS



DAHLIN GROUP  
ARCHITECTS

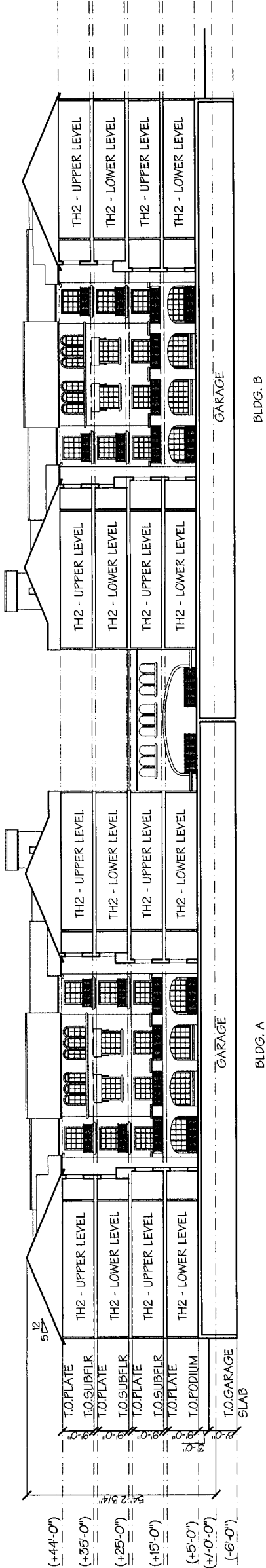
PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

ESTRELLA MILPITAS, CALIFORNIA

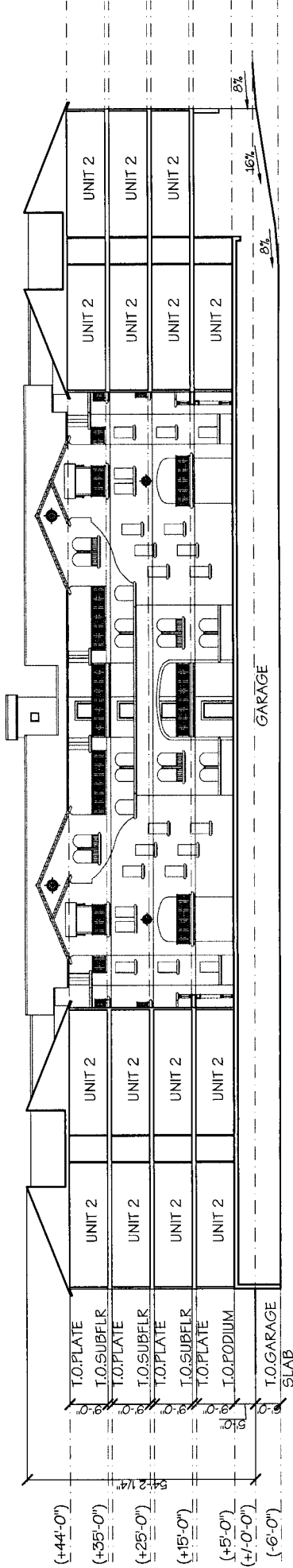
WARMINGTON HOMES CALIFORNIA

5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200 Fax  
925.251.7201

A-13

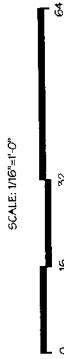


BUILDING SECTION - 1



BUILDING SECTION - 2

BUILDING A&B SECTIONS

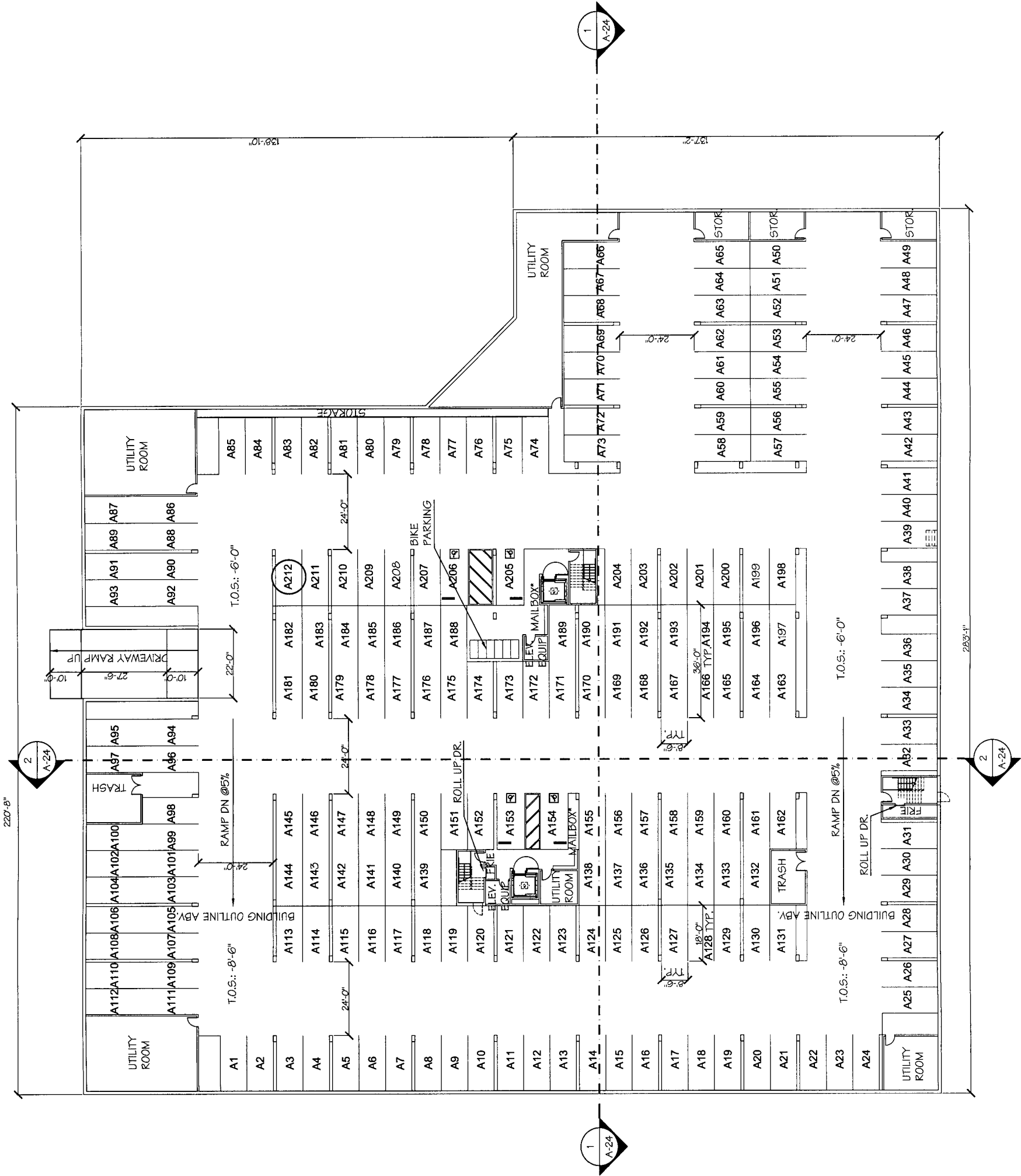


DAHLIN GROUP

5845 Owens Drive  
Pleasanton, CA 94588  
925.251.7200 Fax: 925.251.7201

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

A-14



BLDG. C  
PARKING PROVIDED: 212 SPACES  
BIKE PARKING PROVIDED: 6 SPACES

\* MAILBOX LOCATIONS WILL BE REVISED AS NECESSARY PER USPS REQUIREMENTS.

BUILDING C GARAGE PLAN

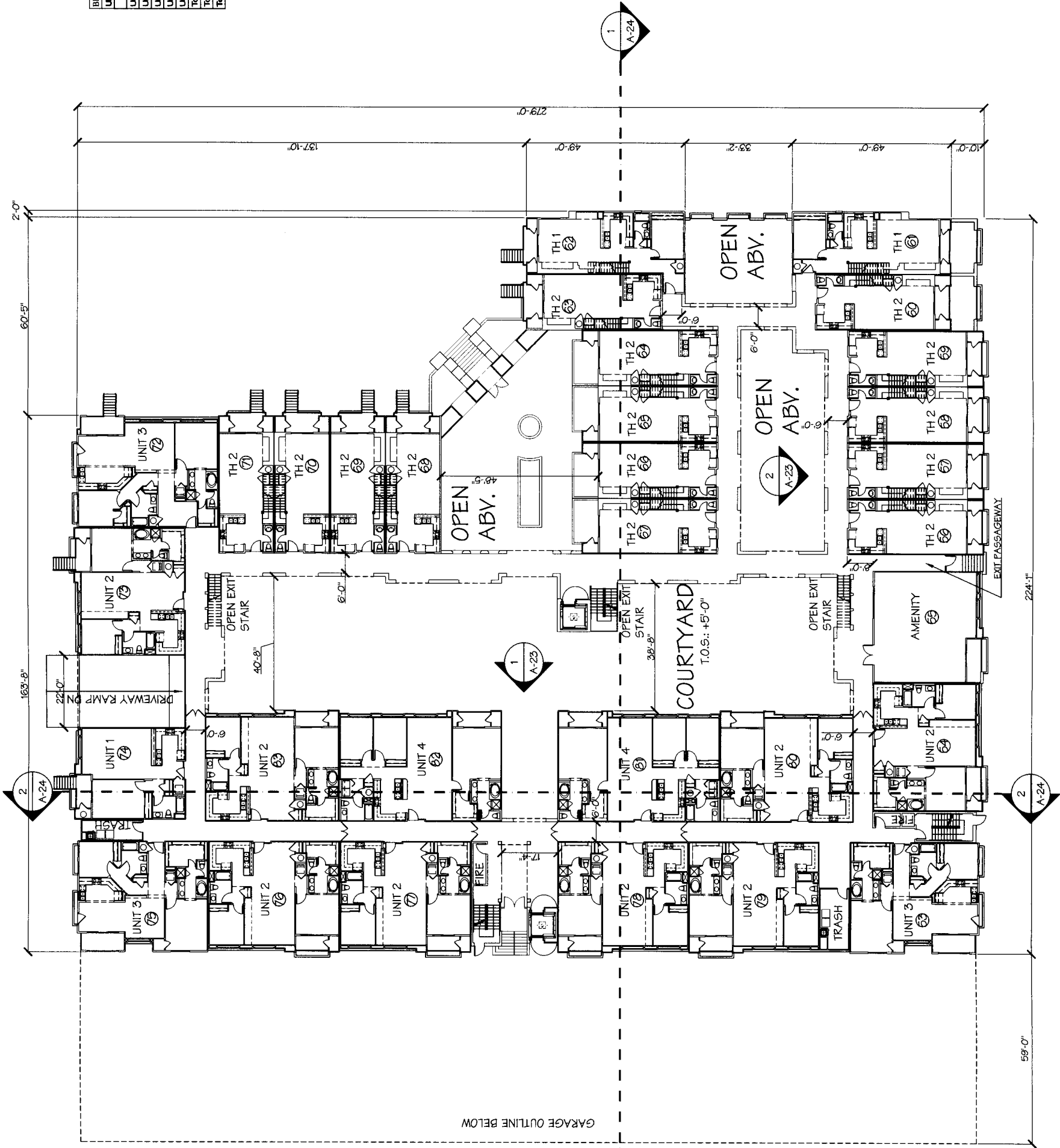


DAHILIN GROUP

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

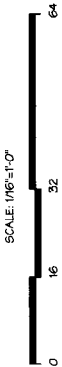
5865 Owens Drive  
Pleasanton, CA 94588  
925.231.7200 Fax  
925.231.7201

A-15



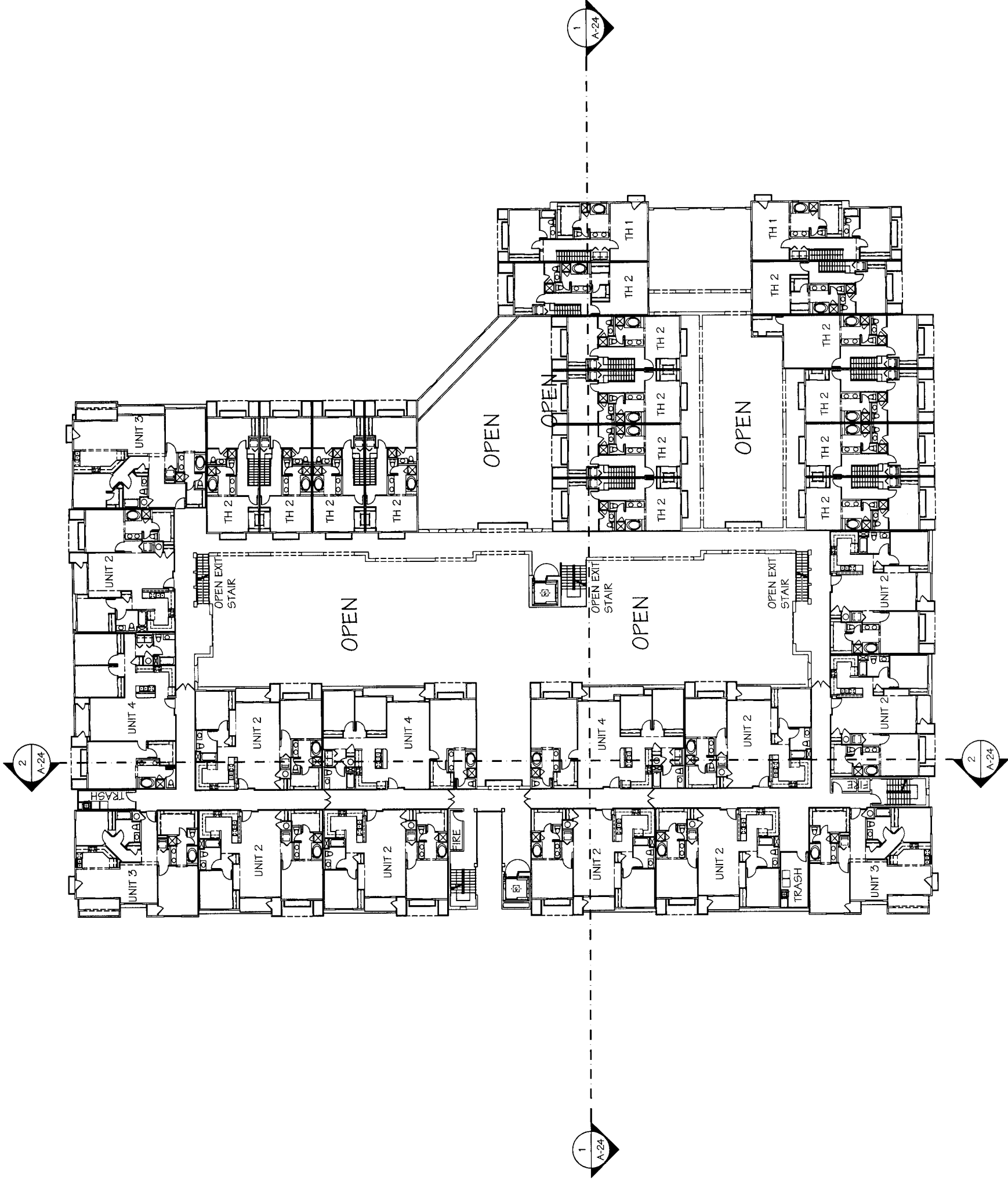
BLDGC	UNIT COUNT						
Unit 1	1	Bedroom Count	1	Bedroom Count	Unit Gross Area (sqft)	Unit Net Area (sqft)	Unit Count (Unit)
Unit 2	2		2		866	818	1
Unit 3	2		2		1,205	1,161	36
Unit 4	3		2		1,240	1,186	12
Unit 5	3		2		1,552	1,501	11
	3		2		1,434	1,372	0
Town 1	3		3		1,649	1,511	4
Town 2	2		2 1/2		1,227	1,140	28
Total							91

BUILDING C 1ST FLOOR PLAN

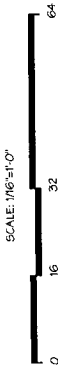


DAHLIN GROUP

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007



BUILDING C 2ND FLOOR PLAN



PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

DAHLIN GROUP

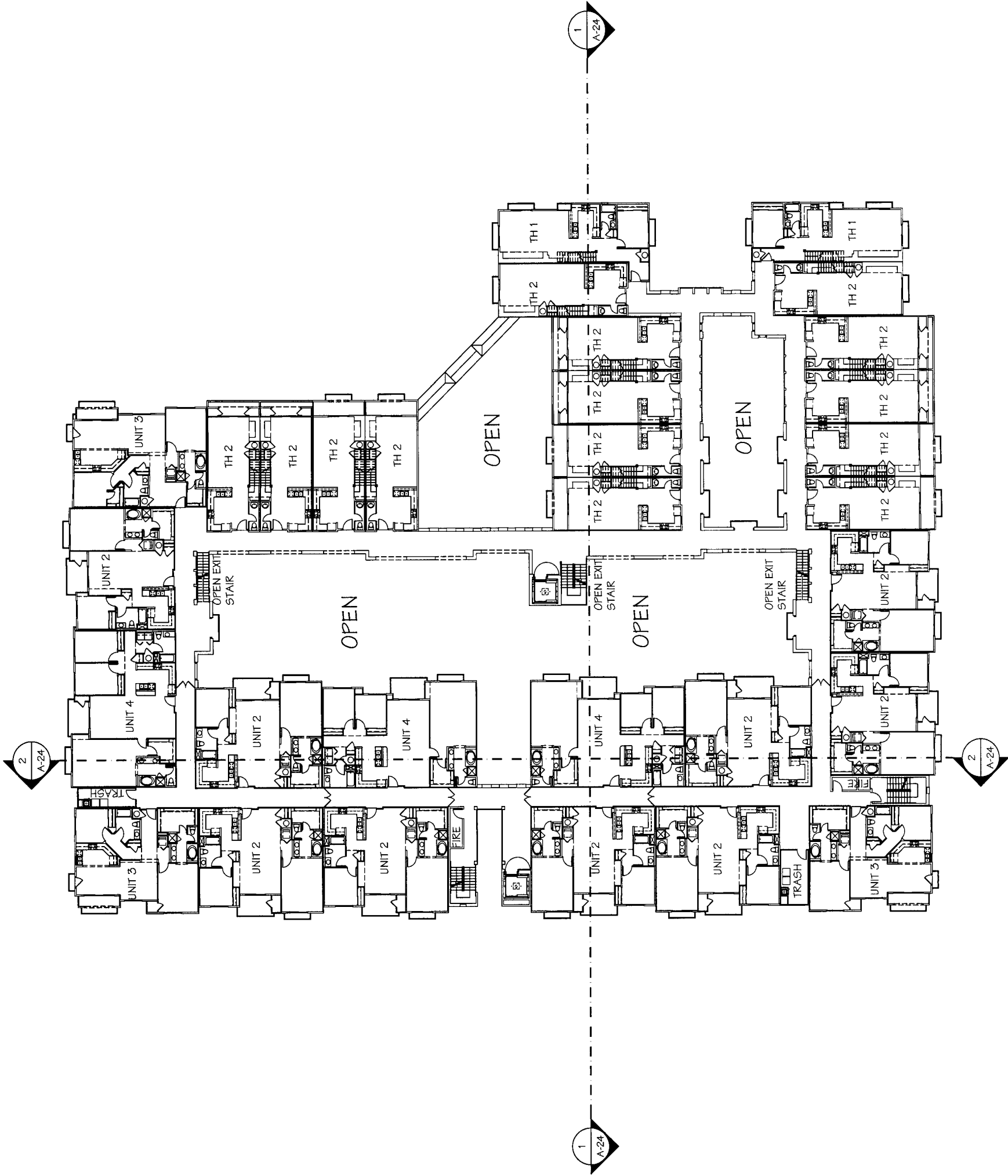
ESTRELLA MILPITAS, CALIFORNIA

WARMINGTON HOMES CALIFORNIA

5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

A-17





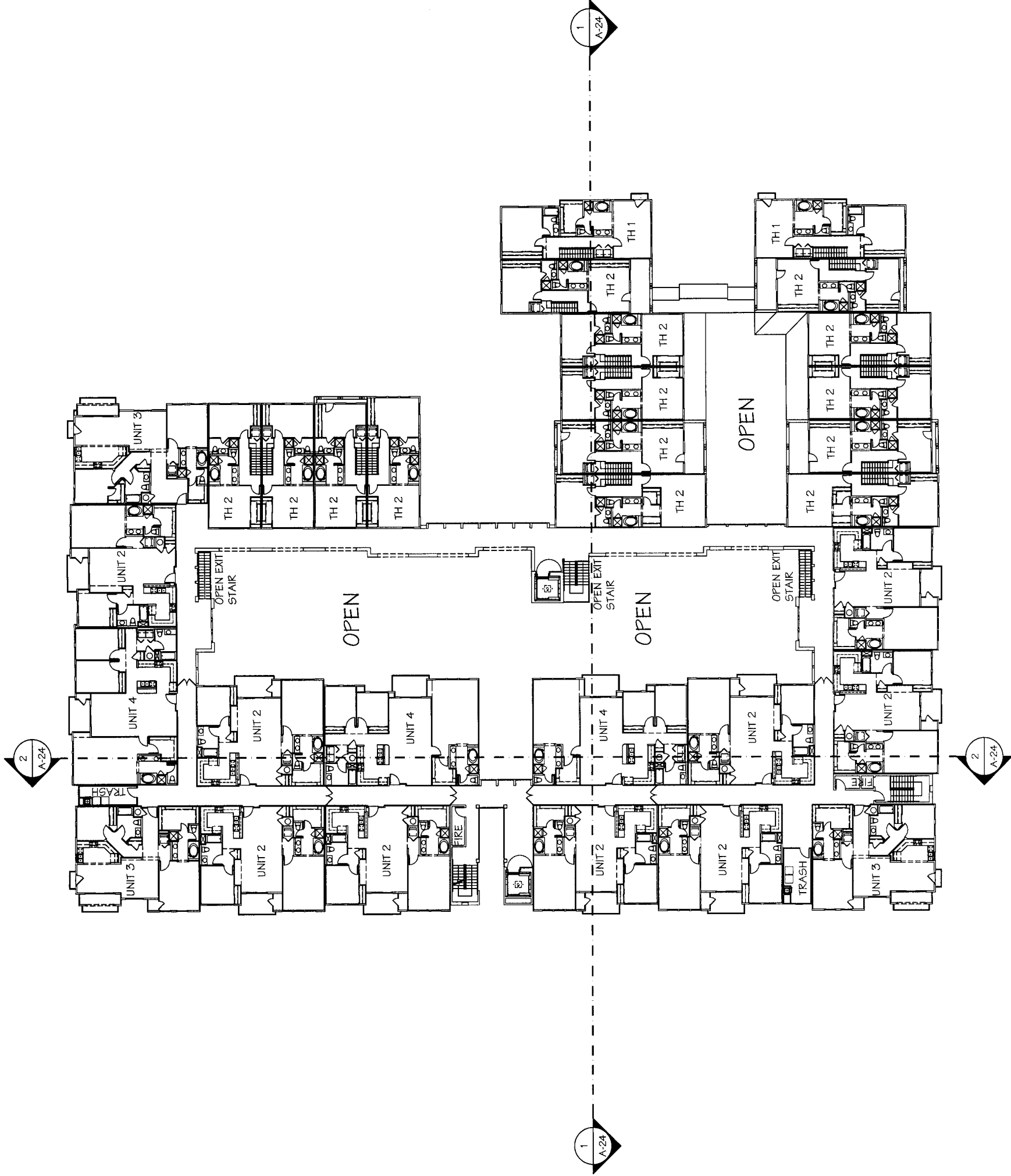
BUILDING C 3RD FLOOR PLAN

SCALE: 1/16"=1'-0"



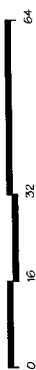
DAHLLIN GROUP

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007



BUILDING C 4TH FLOOR PLAN

SCALE: 1/16"=1'-0"



DAHLIN GROUP

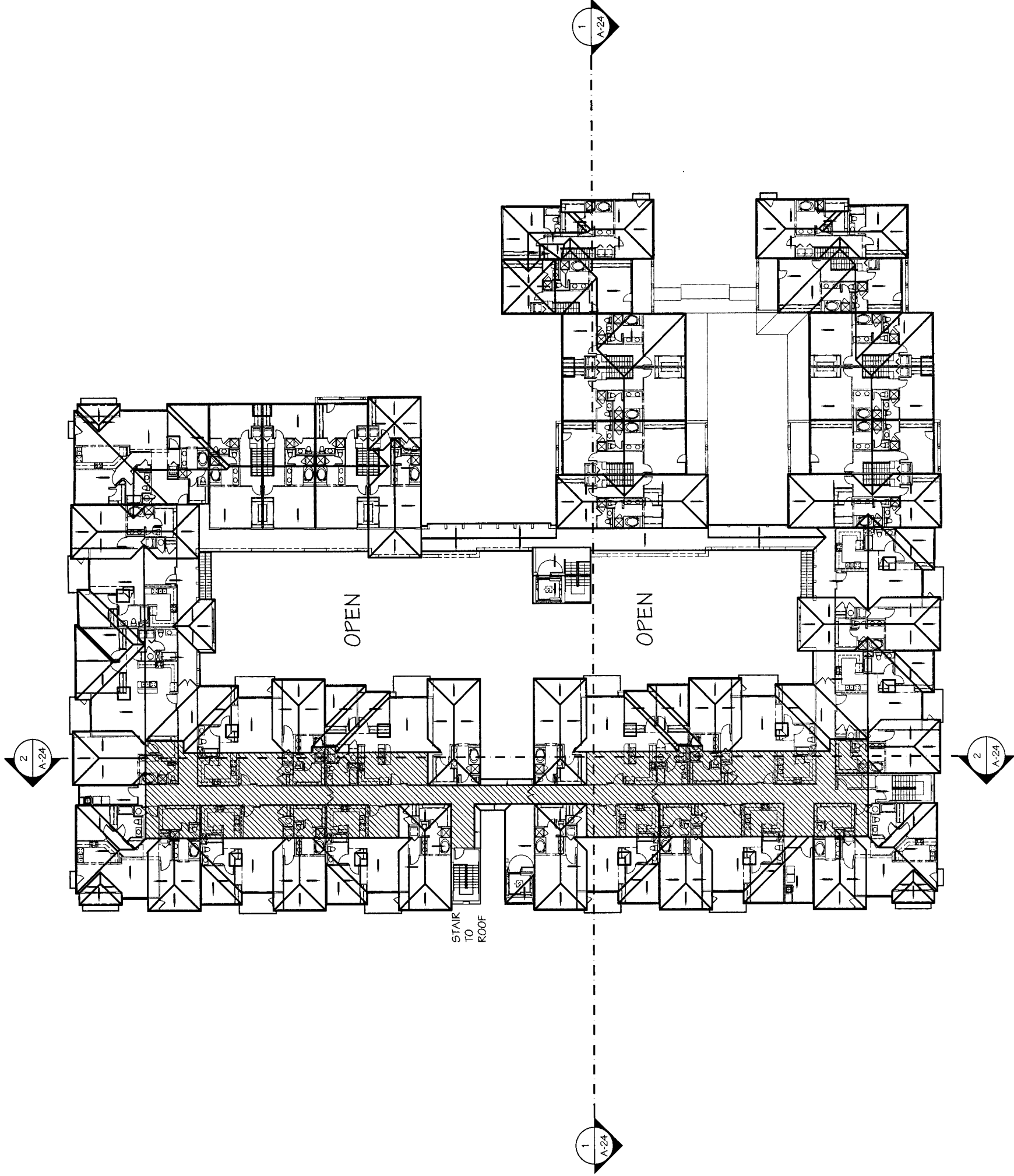
PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

ESTRELLA MILPITAS, CALIFORNIA

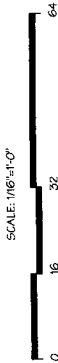
WARMINGTON HOMES CALIFORNIA

5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

A-19



BUILDING C ROOF PLAN



DAHLIN GROUP

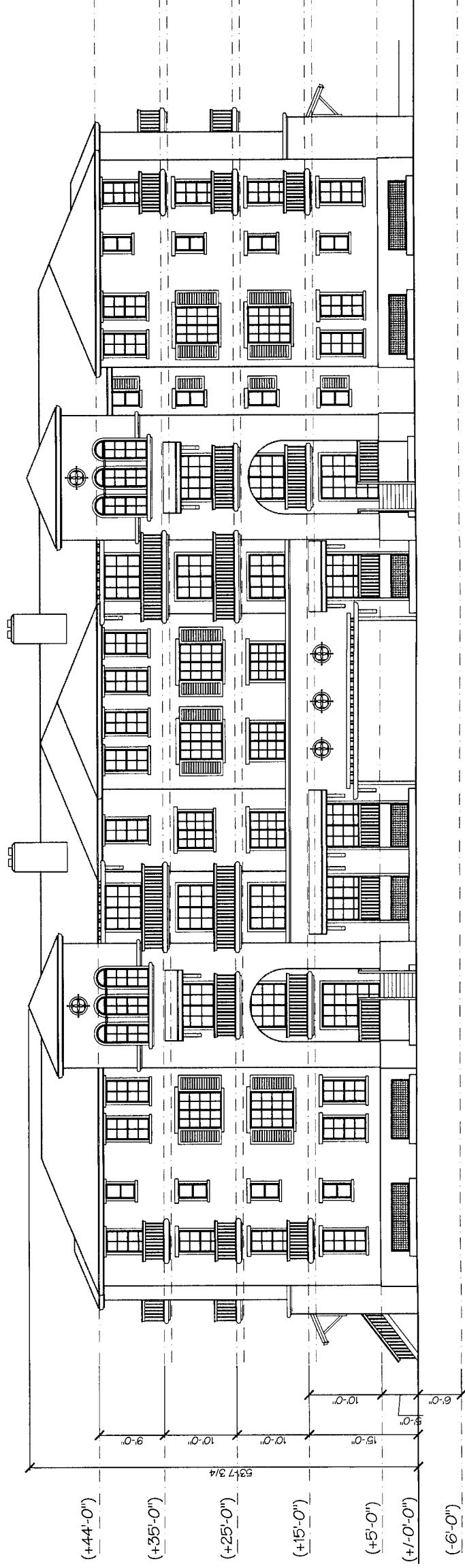
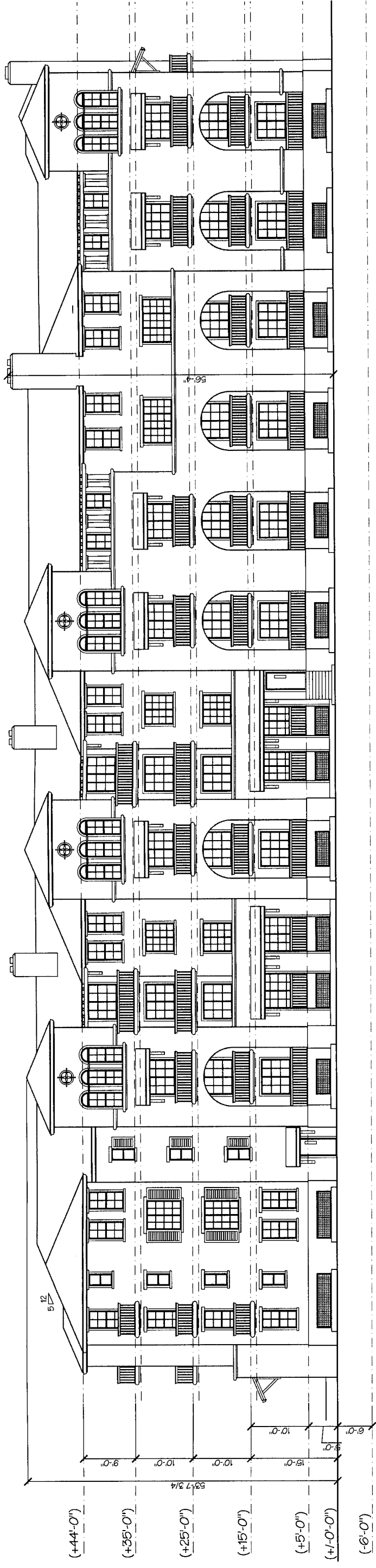
PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

ESTRELLA MILPITAS, CALIFORNIA

WARMINGTON HOMES CALIFORNIA

5845 Owens Drive  
Pleasanton, CA 94588  
925.231.7200  
925.231.7201 Fax

A-20



BUILDING C ELEVATIONS

SCALE: 1/8" = 1'-0"

DAHLIN GROUP

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

DATE: MAR. 8TH. 2007

ESTRELLA  
MILPITAS, CALIFORNIA

WARMINGTON HOMES CALIFORNIA

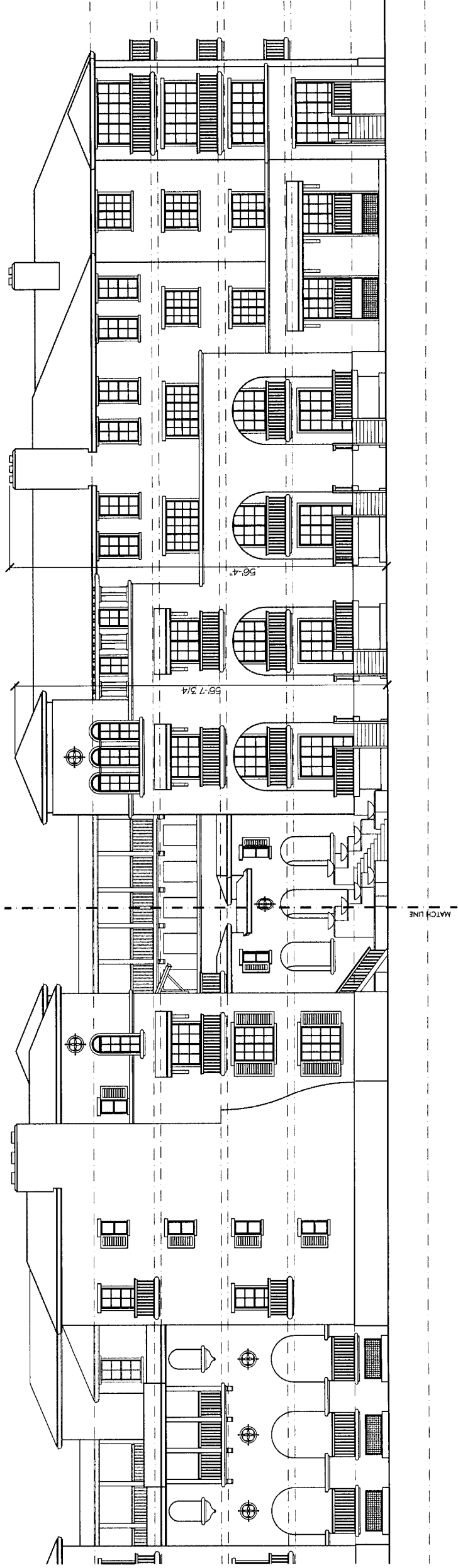
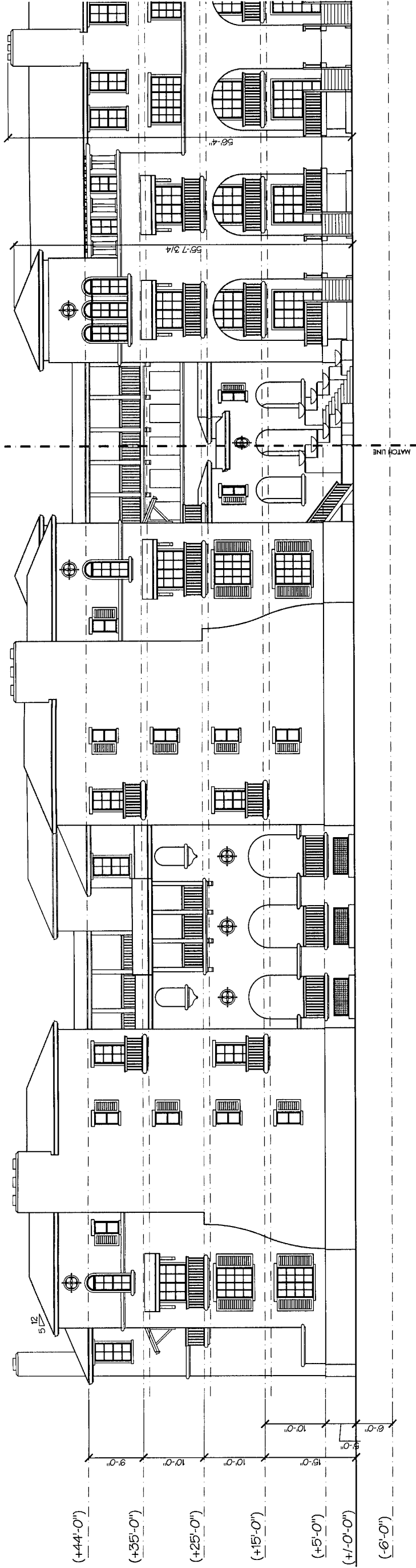
5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

5865 Owens Drive  
Pleasanton, CA 94568

925.251.7200

925.251.7201 Fax

A-21



BUILDING C ELEVATIONS

C STREET ELEVATION

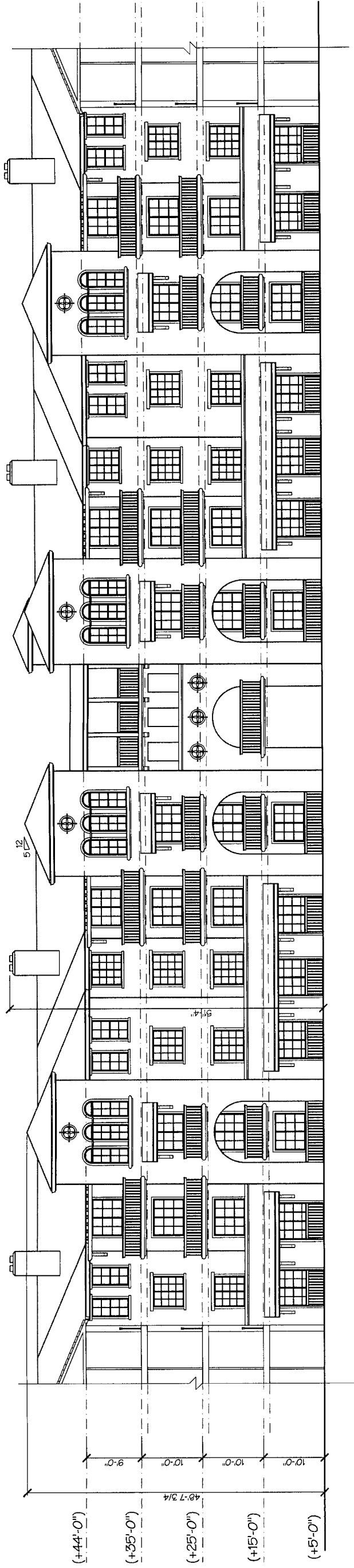
DAHLIN GROUP

ESTRELLA MILPITAS, CALIFORNIA  
WARMINGTON HOMES CALIFORNIA

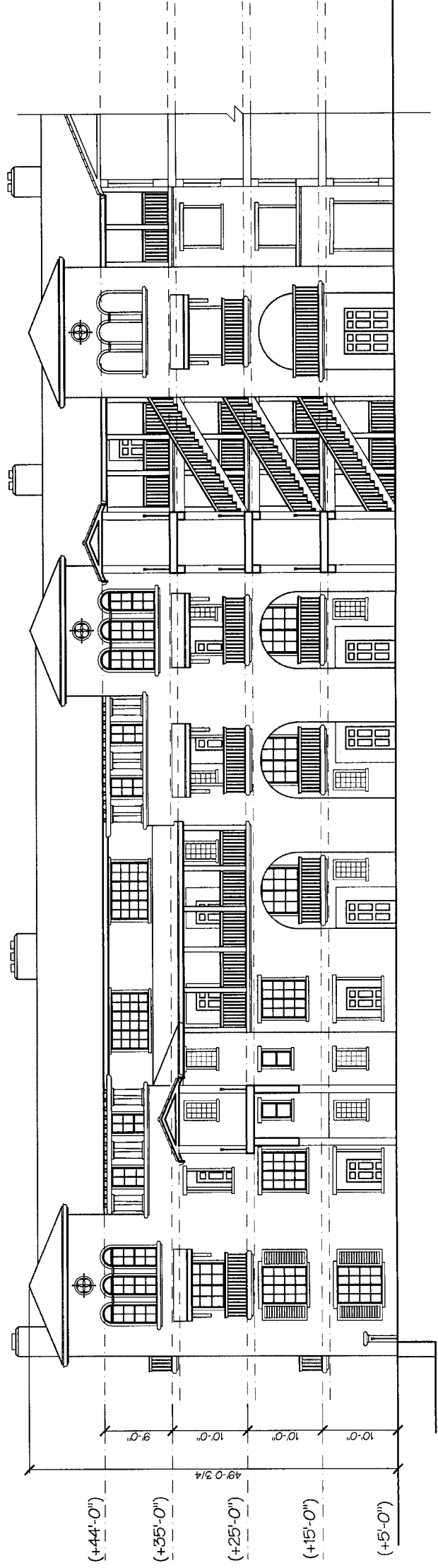
PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

5865 Orient Drive  
Pacifica, CA 94488  
925.251.7200  
925.251.7201 Fax

A-22



COURTYARD ELEVATION - 1



COURTYARD ELEVATION - 2

BUILDING C  
COURTYARD ELEVATIONS  
SCALE: 1/8"=1'-0"  
0 8 16 32

DAHLIN GROUP  
ARCHITECTS

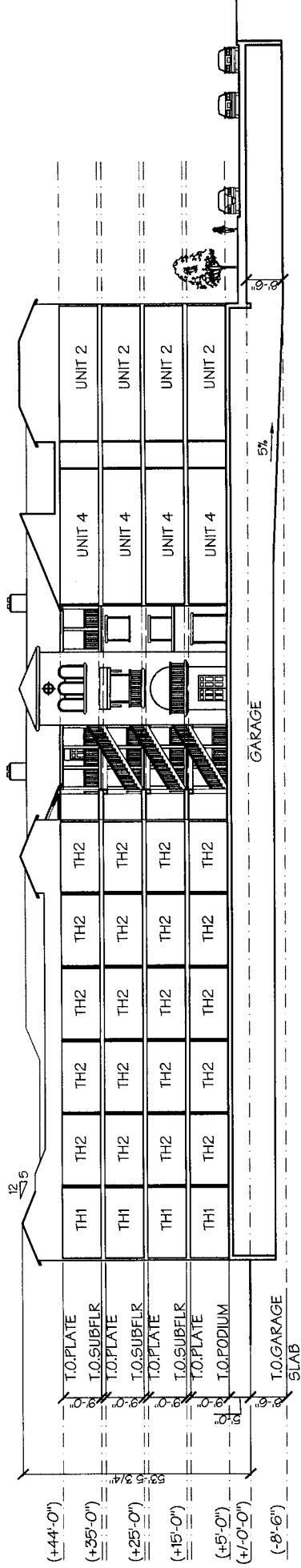
PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

ESTRELLA MILPITAS, CALIFORNIA

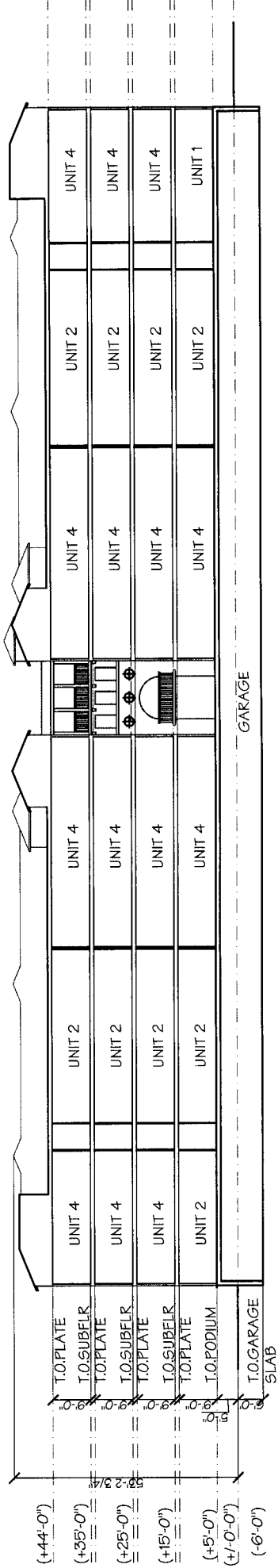
WARMINGTON HOMES CALIFORNIA

5845 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

A-23

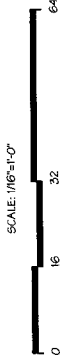


BUILDING SECTION - 1



BUILDING SECTION - 2

BUILDING C SECTIONS



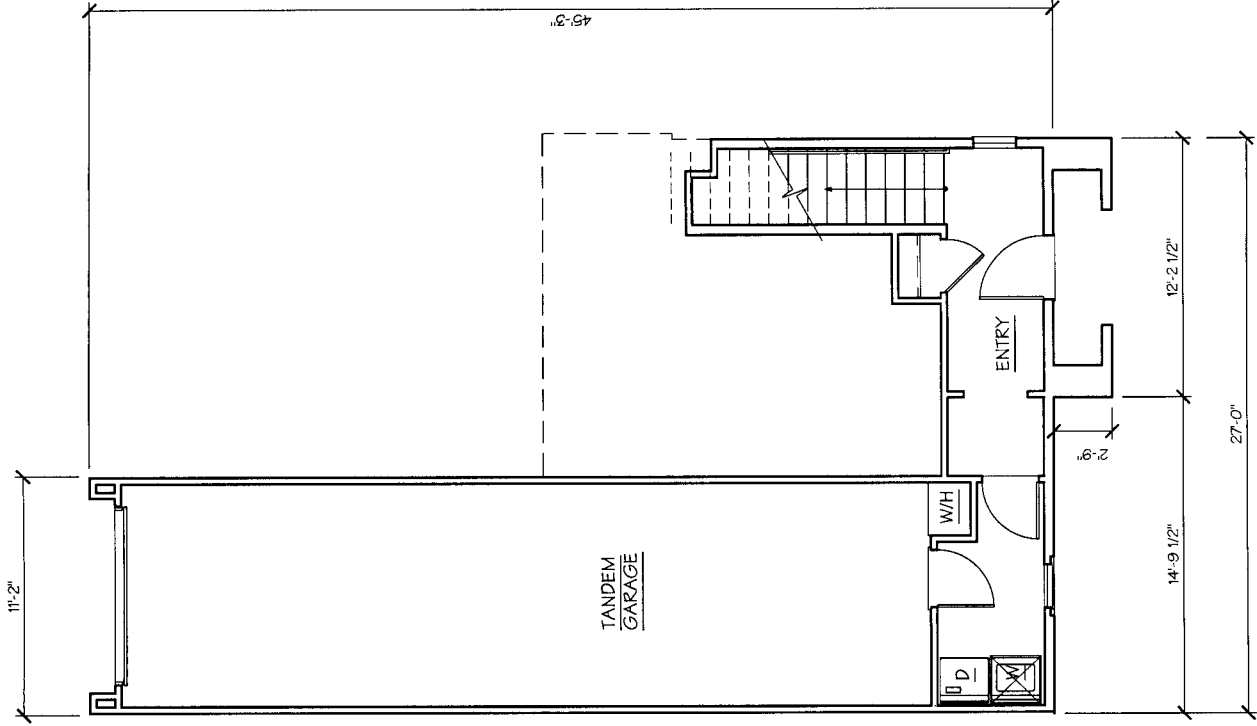
PROJECT NO.: 400.007  
DATE: MAR. 8TH, 2007

ESTRELLA MILPITAS, CALIFORNIA

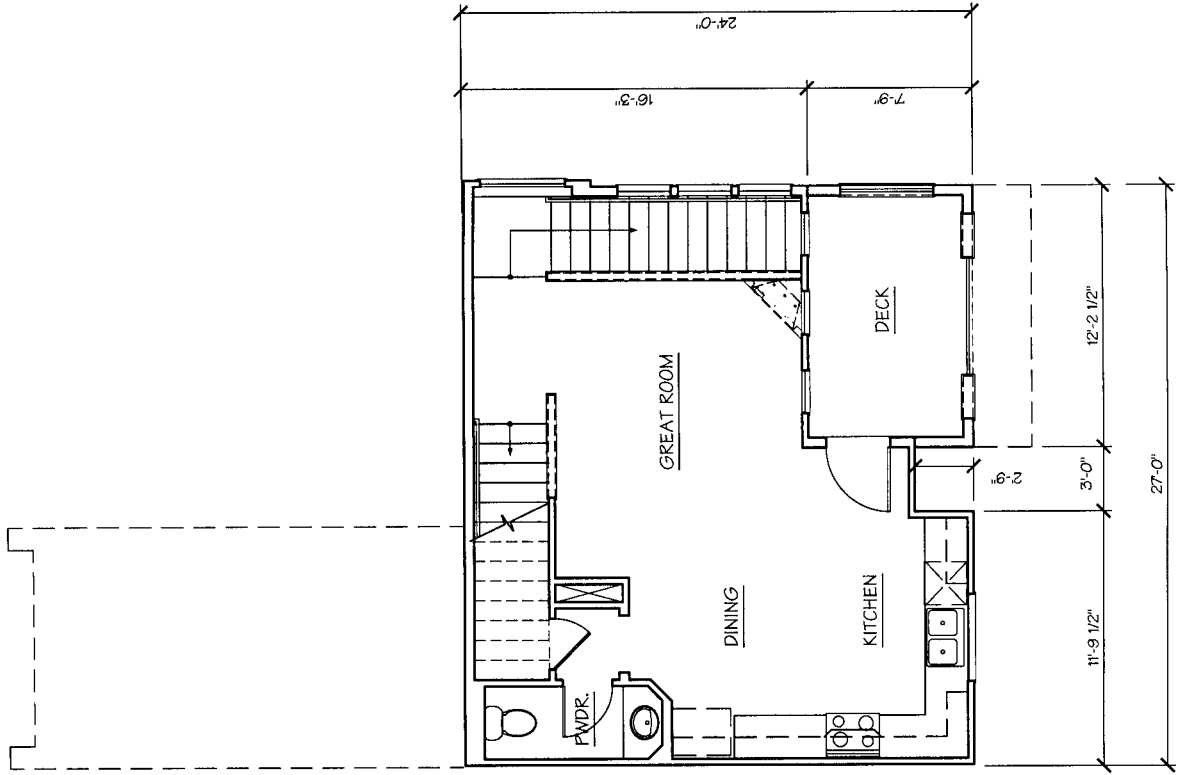
WARMINGTON HOMES CALIFORNIA

5845 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

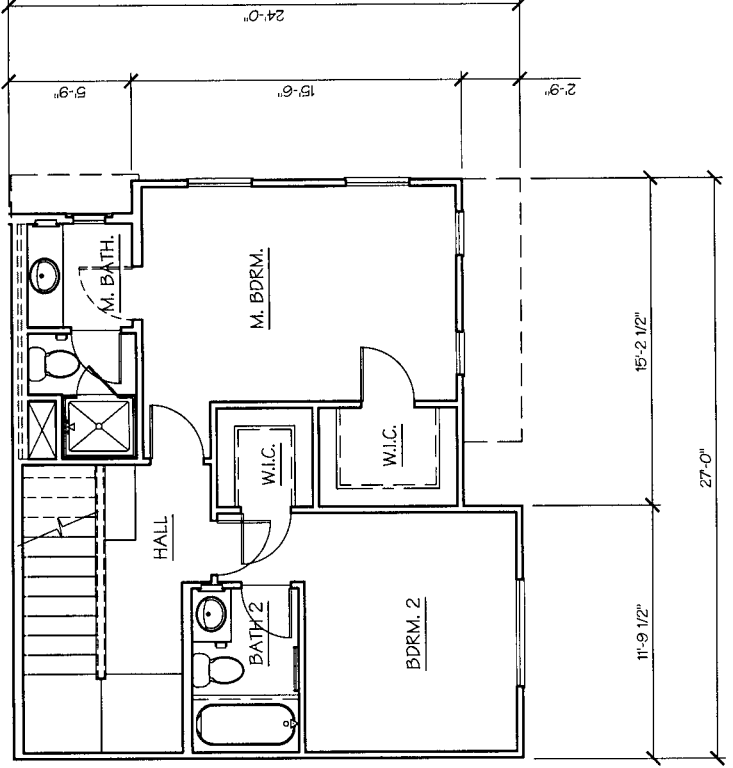
A-24



1ST FLOOR PLAN  
216 SQFT.(210 SQFT. NET)



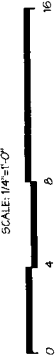
2ND FLOOR PLAN  
475 SQFT. (449 SQFT. NET)



3RD FLOOR PLAN  
523 SQFT.(489 SQFT. NET)

UNIT B  
TWO BEDROOMS  
1,214 SQFT. TOTAL  
(1,148 SQFT. NET)

TOWNHOUSE UNIT PLANS  
- UNIT B



DAHLIN GROUP  
ARCHITECTS

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

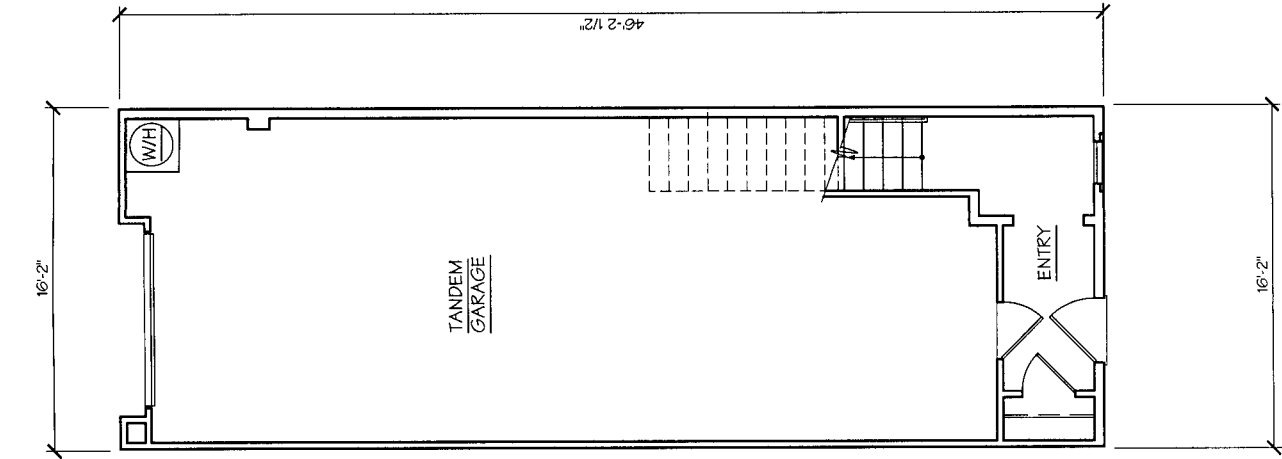
ESTRELLA MILPITAS, CALIFORNIA

WARMINGTON HOMES CALIFORNIA

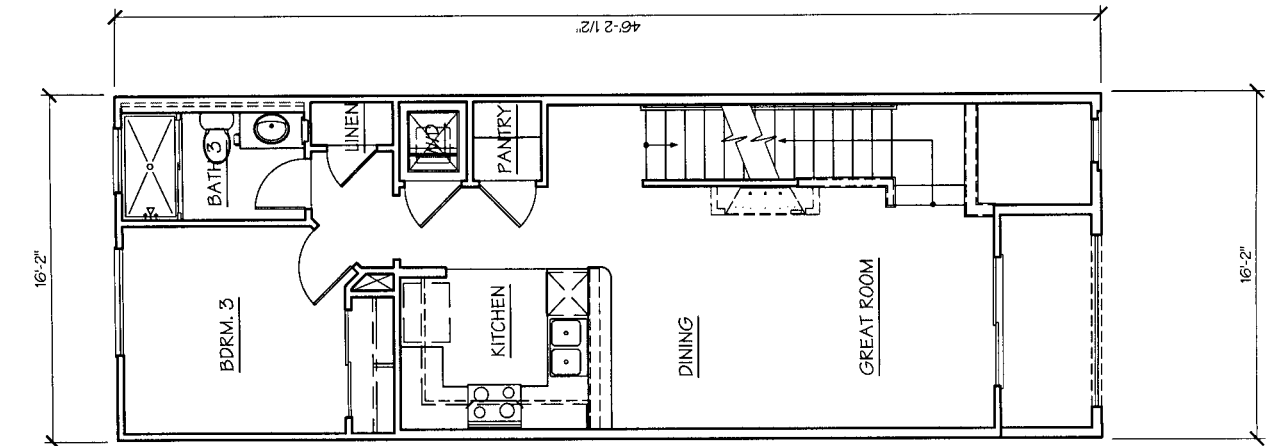
5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

A-25

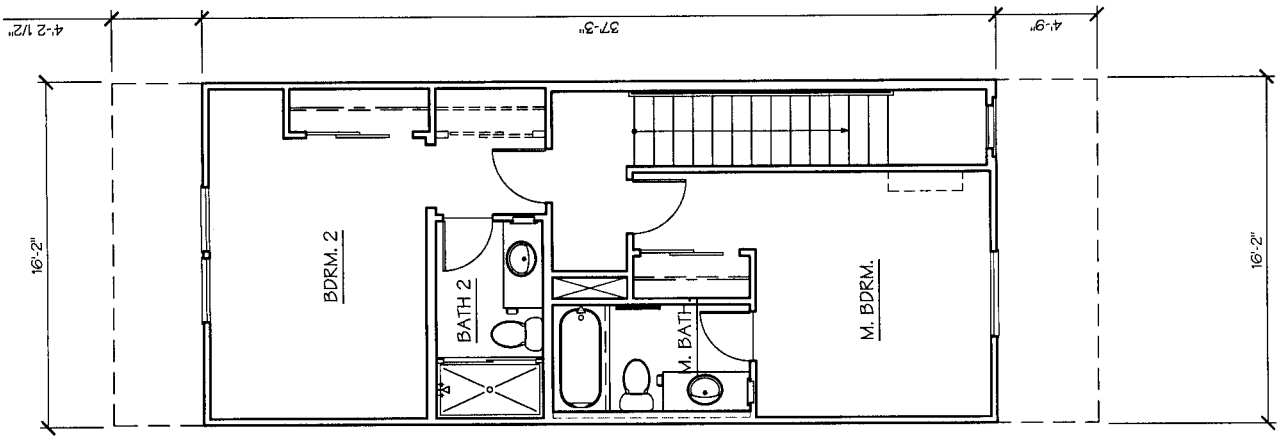




1ST FLOOR PLAN  
138 SQFT. (129 SQFT. NET)



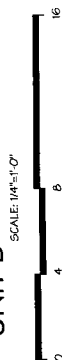
2ND FLOOR PLAN  
680 SQFT. (639 SQFT. NET)



3RD FLOOR PLAN  
527 SQFT.(496 SQFT. NET)

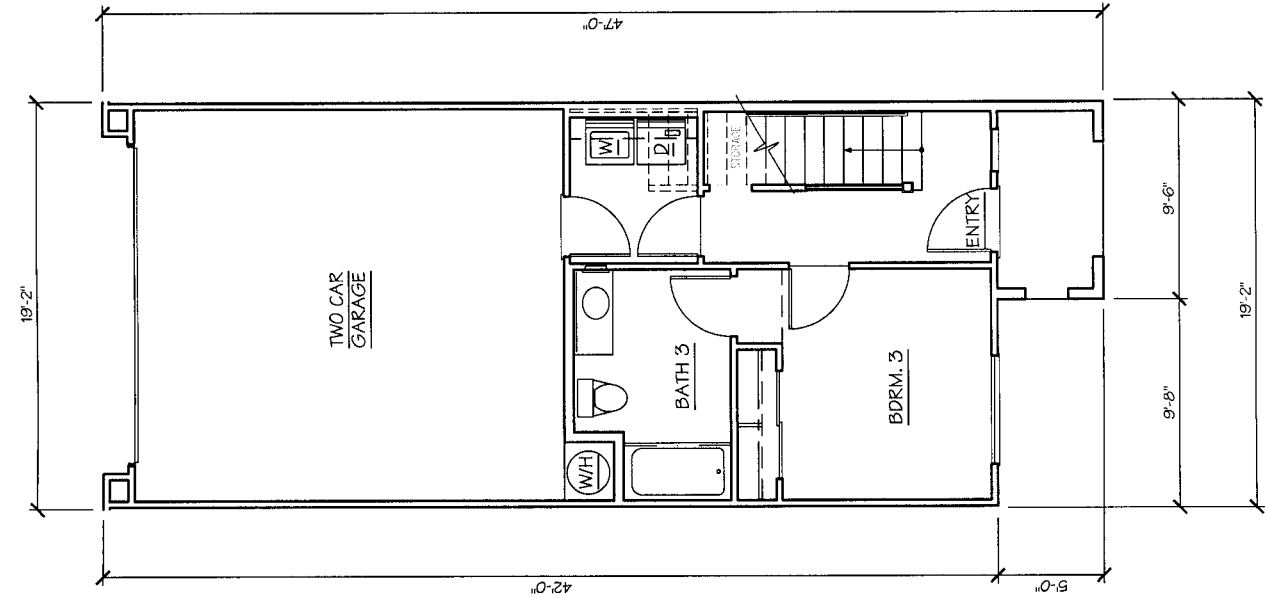
UNIT D  
THREE BEDROOMS  
1,345 SQFT. TOTAL  
(1,264 SQFT. NET)

TOWNHOUSE UNIT PLANS  
- UNIT D

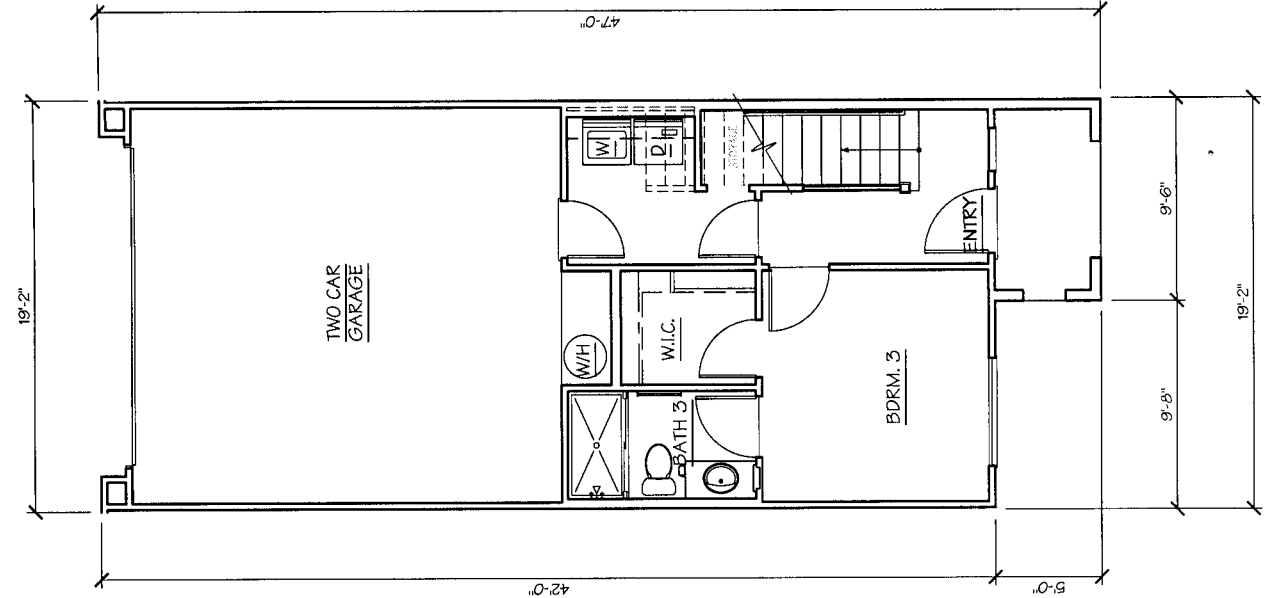


DAHLLIN GROUP  
ARCHITECTS

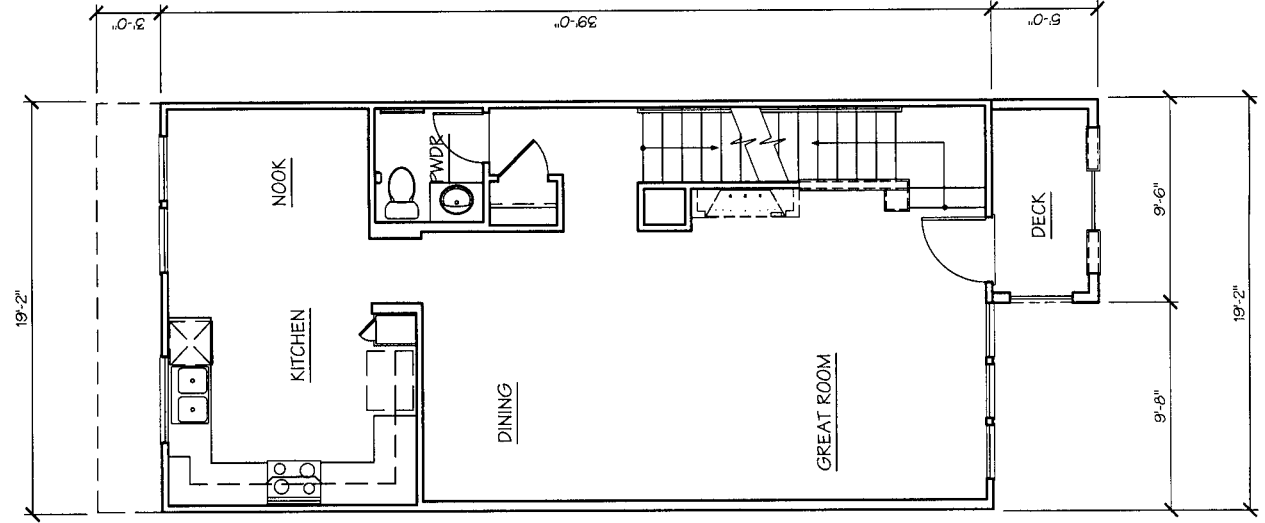
PROJECT NO.: 400.007  
DATE: MAR. 8TH, 2007



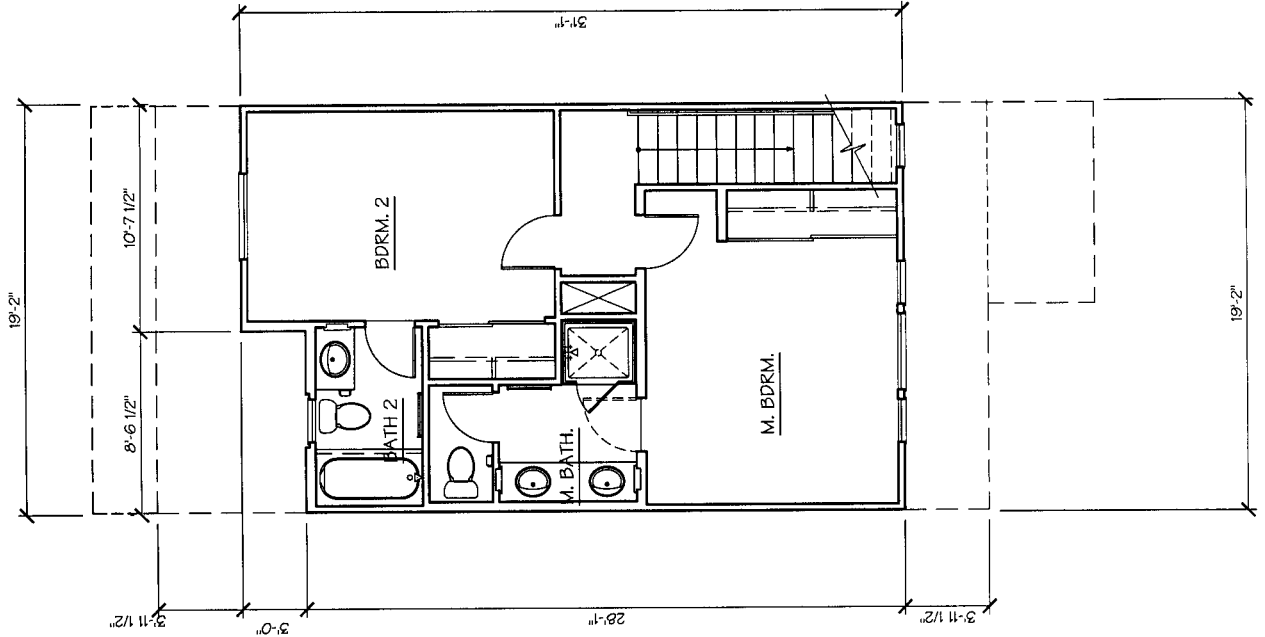
1ST FLOOR PLAN (ACCESSIBLE OPTION)  
379 SQFT. (359 SQFT. NET)



1ST FLOOR PLAN  
375 SQFT (351 SQFT. NET).



2ND FLOOR PLAN  
741 SQFT. (703 SQFT. NET)

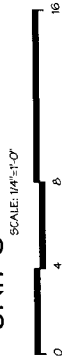


3RD FLOOR PLAN  
518 SQFT.(485 SQFT. NET)

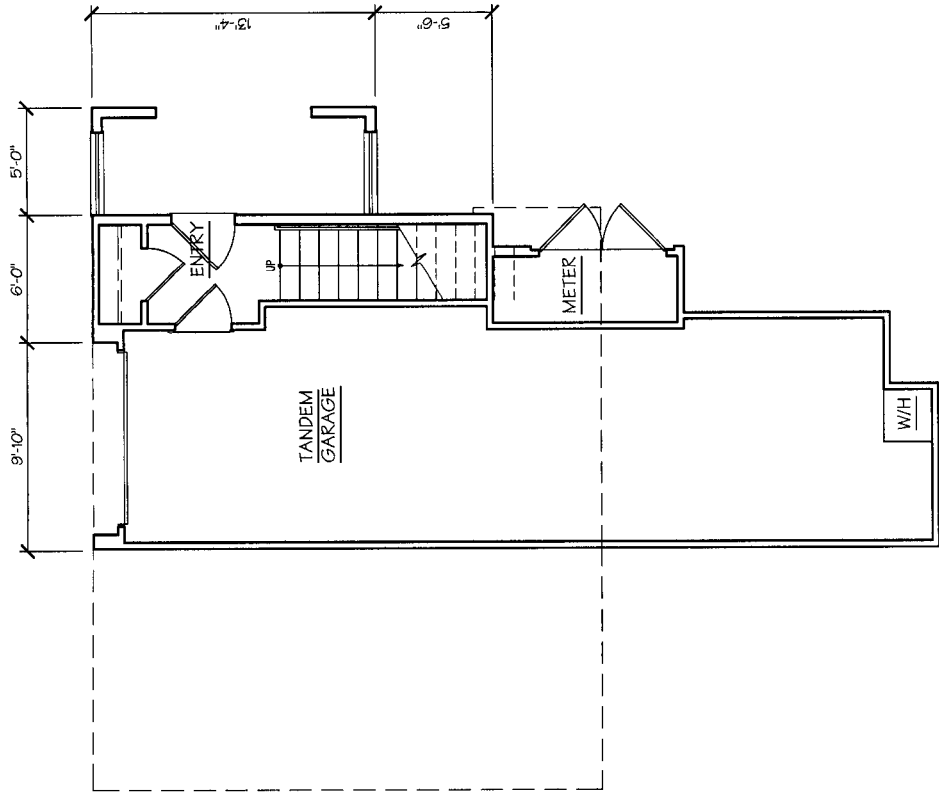
UNIT G  
THREE BEDROOMS  
1,634 SQFT. TOTAL  
(1,539 SQFT. NET)

UNIT G (ACCESSIBLE)  
THREE BEDROOMS  
1,638 SQFT. TOTAL  
(1,547 SQFT. NET)

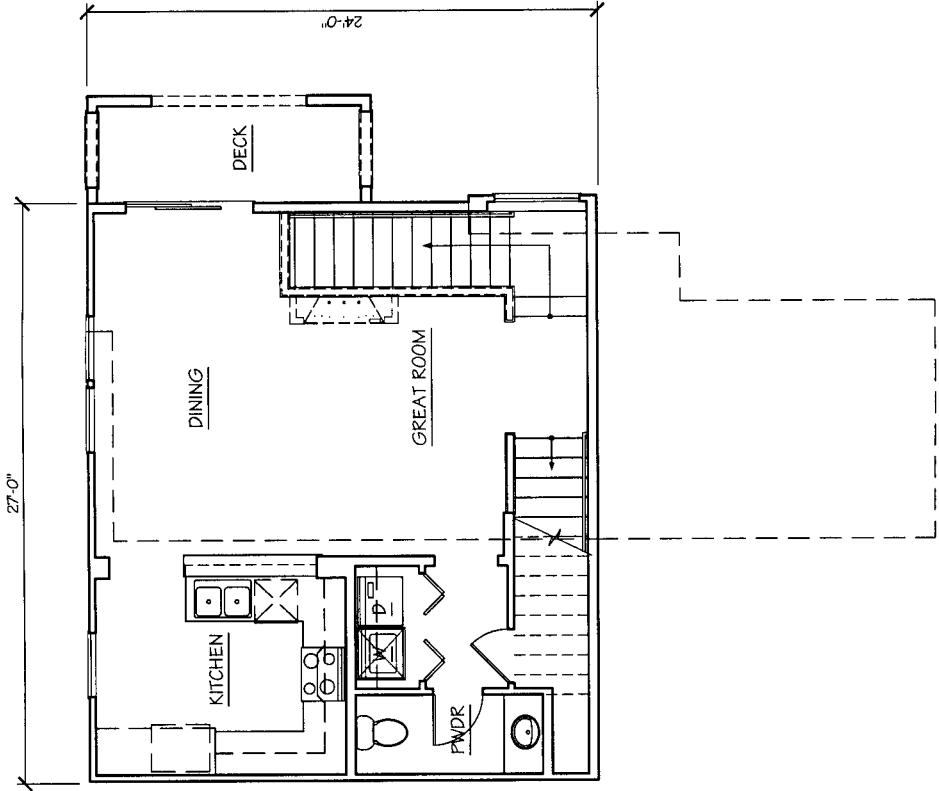
TOWNHOUSE UNIT PLANS  
- UNIT G



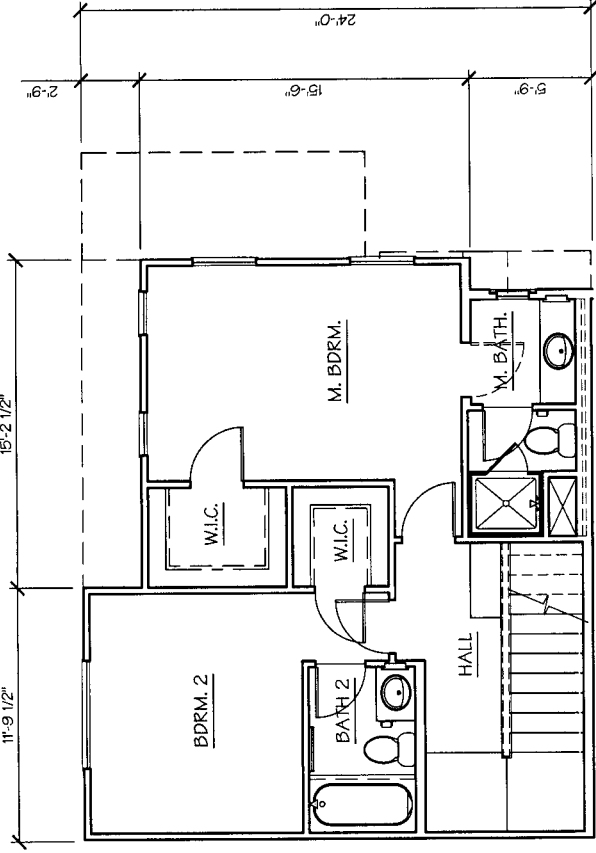
PROJECT NO. 400.007  
DATE: MAR. 8TH, 2007



1ST FLOOR PLAN  
89 SQFT. (84 SQFT. NET)



2ND FLOOR PLAN  
580 SQFT. (551 SQFT. NET)



3RD FLOOR PLAN  
523 SQFT.(489 SQFT. NET)

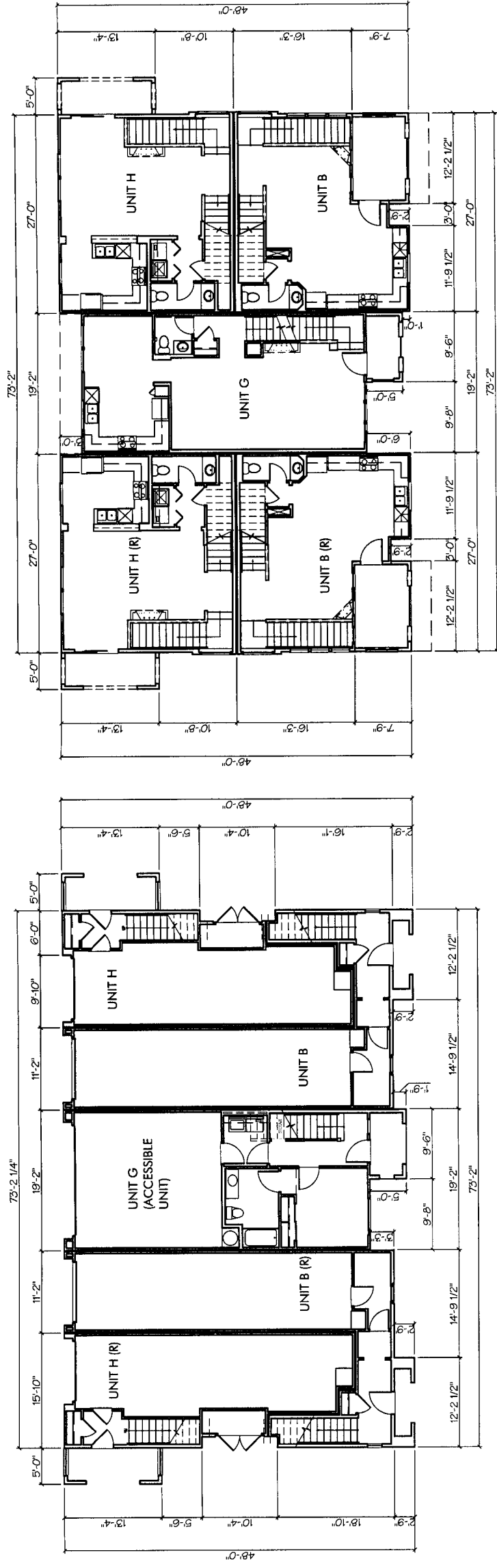
UNIT H  
TWO BEDROOMS  
1,192 SQFT. TOTAL  
(1,124 SQFT. NET)

TOWNHOUSE UNIT PLANS  
- UNIT H

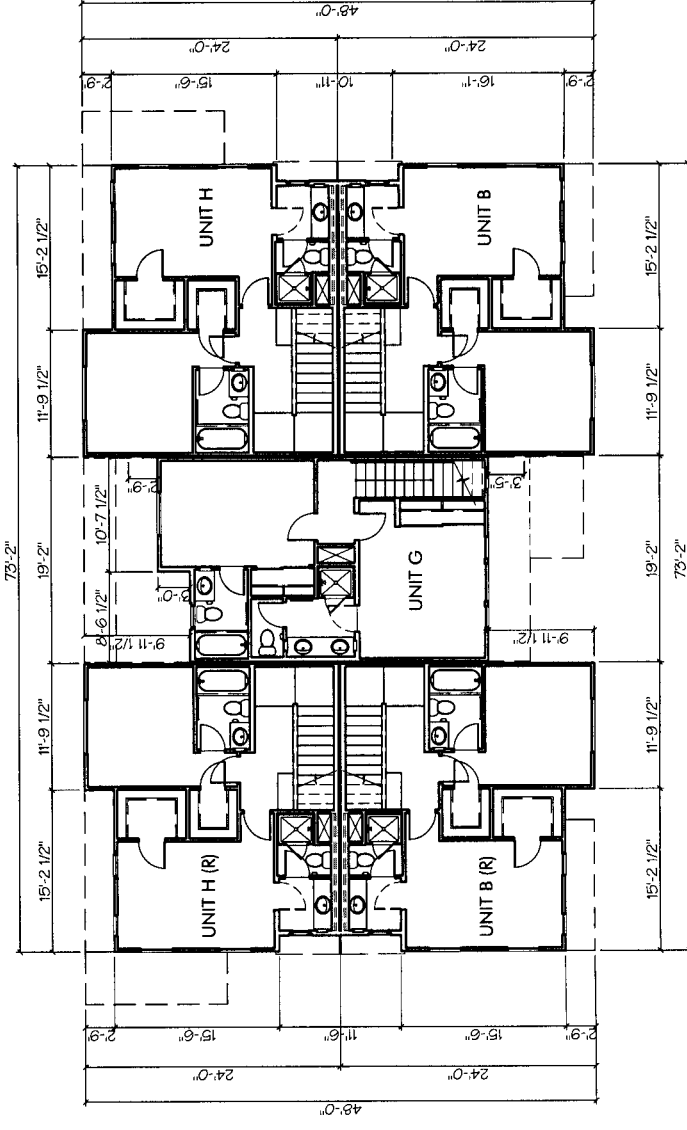


DAHLLIN GROUP

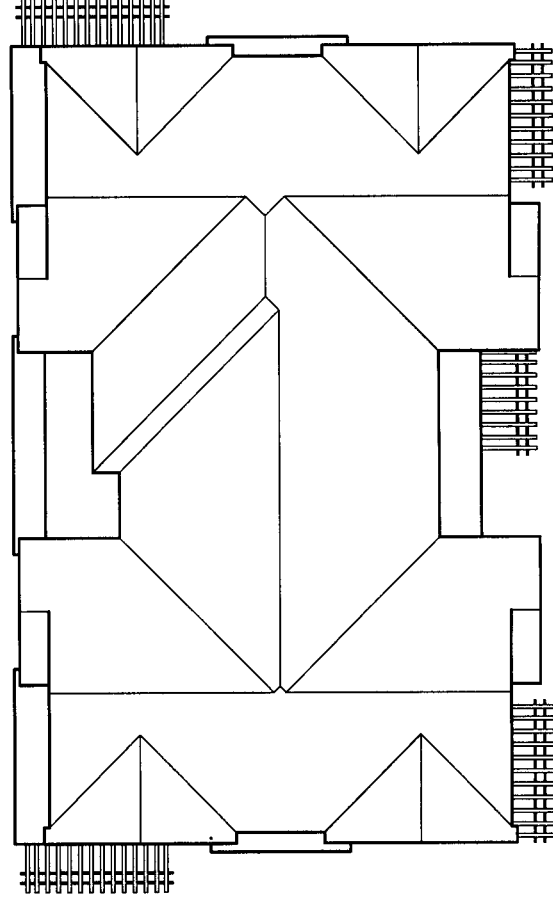
PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007



## 2ND FLOOR PLAN



### 3RD FLOOR PLAN

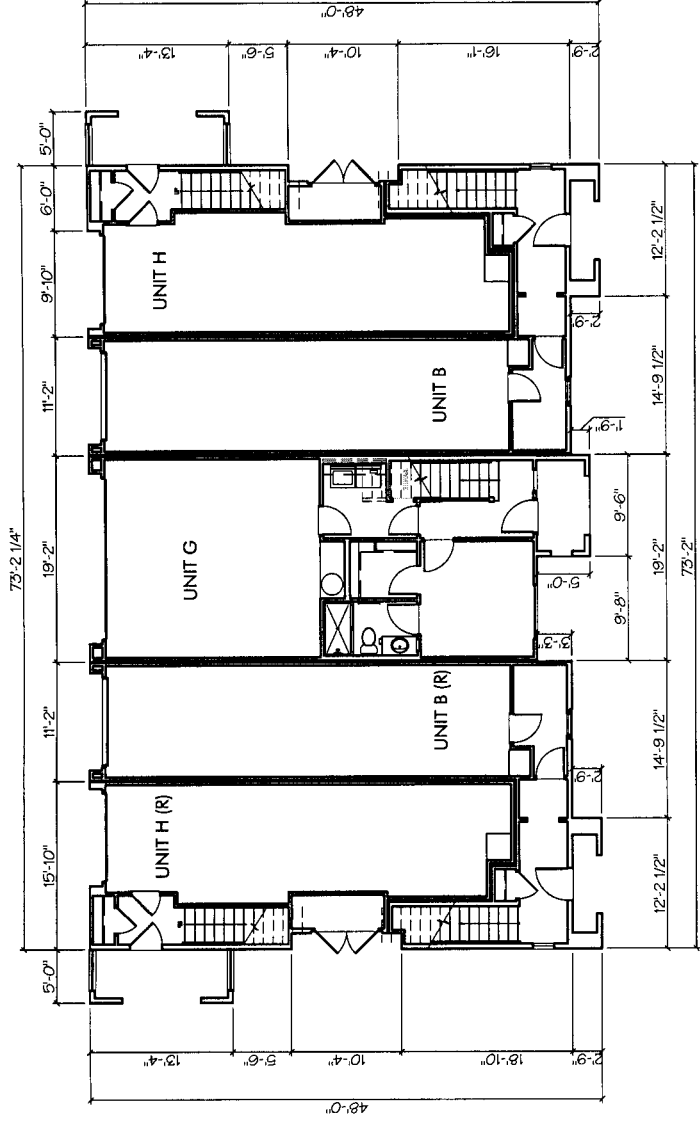


## ROOF PLAN

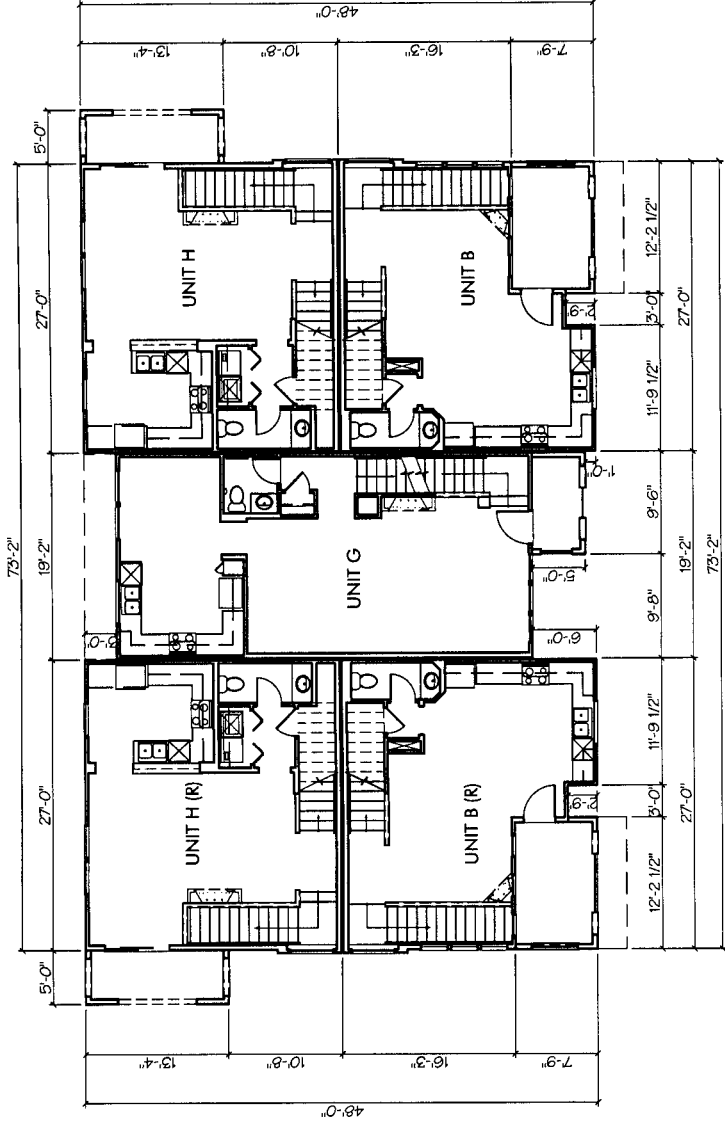
**TOWNHOUSE PLANS  
- 5 UNIT BUILDING-A**  
SCALE: 1/8"=1'-0"



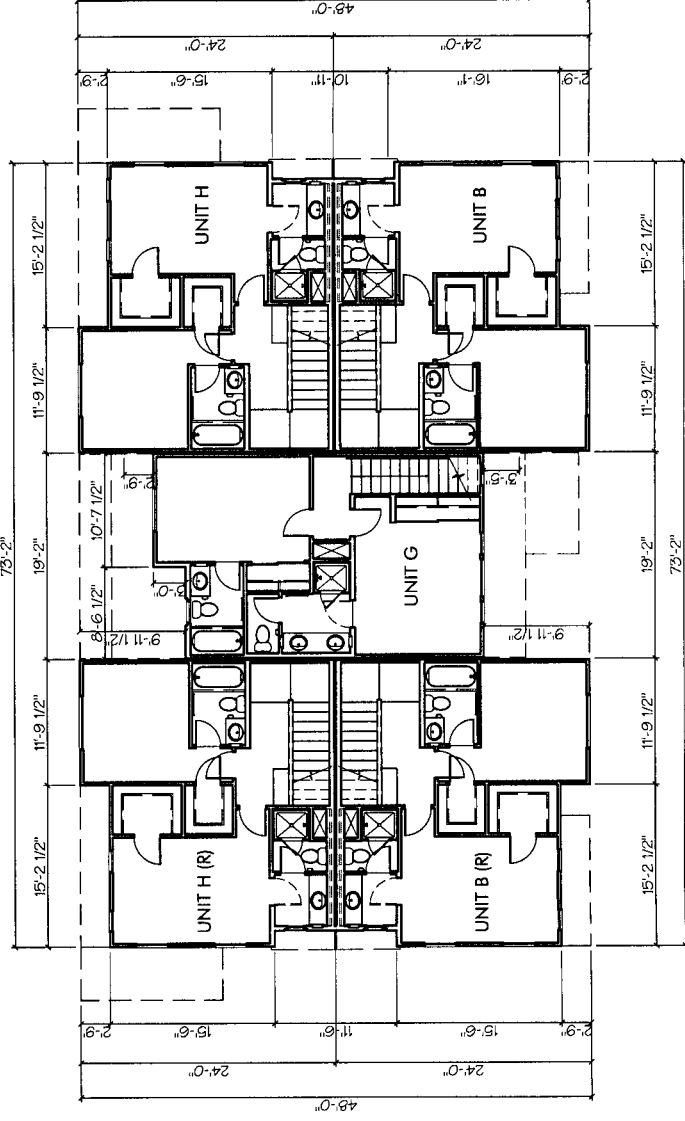
DAHLIN GROUP



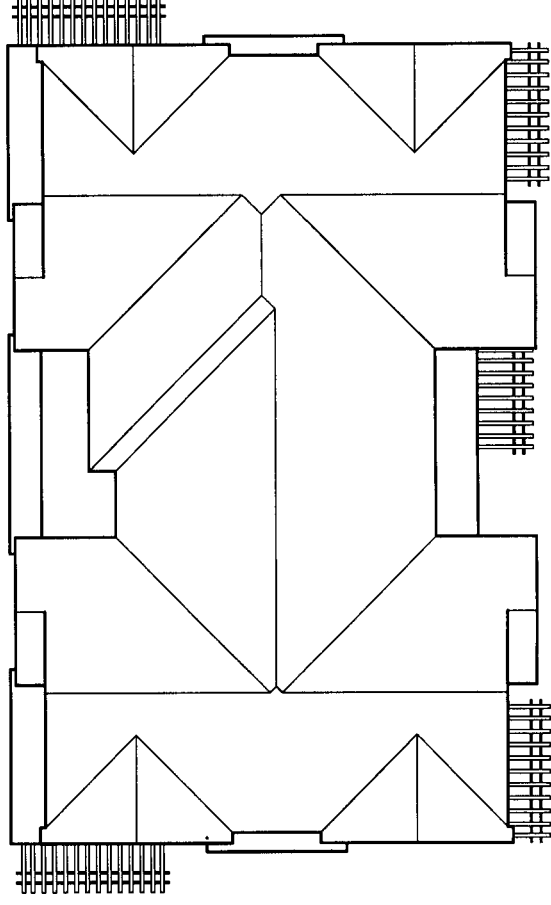
1ST FLOOR PLAN



2ND FLOOR PLAN

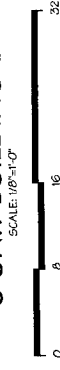


3RD FLOOR PLAN



ROOF PLAN

TOWNHOUSE PLANS  
- 5 UNIT BUILDING-B



DAHLIN GROUP

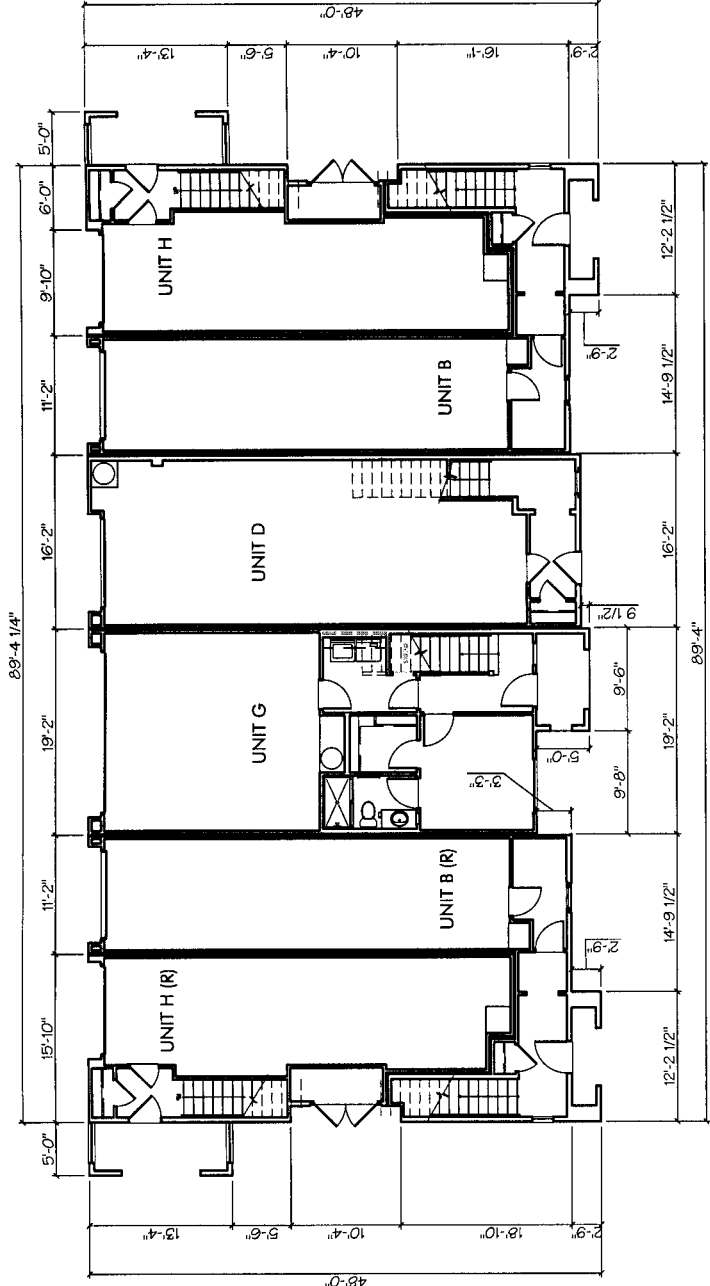
PROJECT NO.: 400.007  
DATE: MAR. 8TH, 2007

ESTRELLA MILPITAS, CALIFORNIA

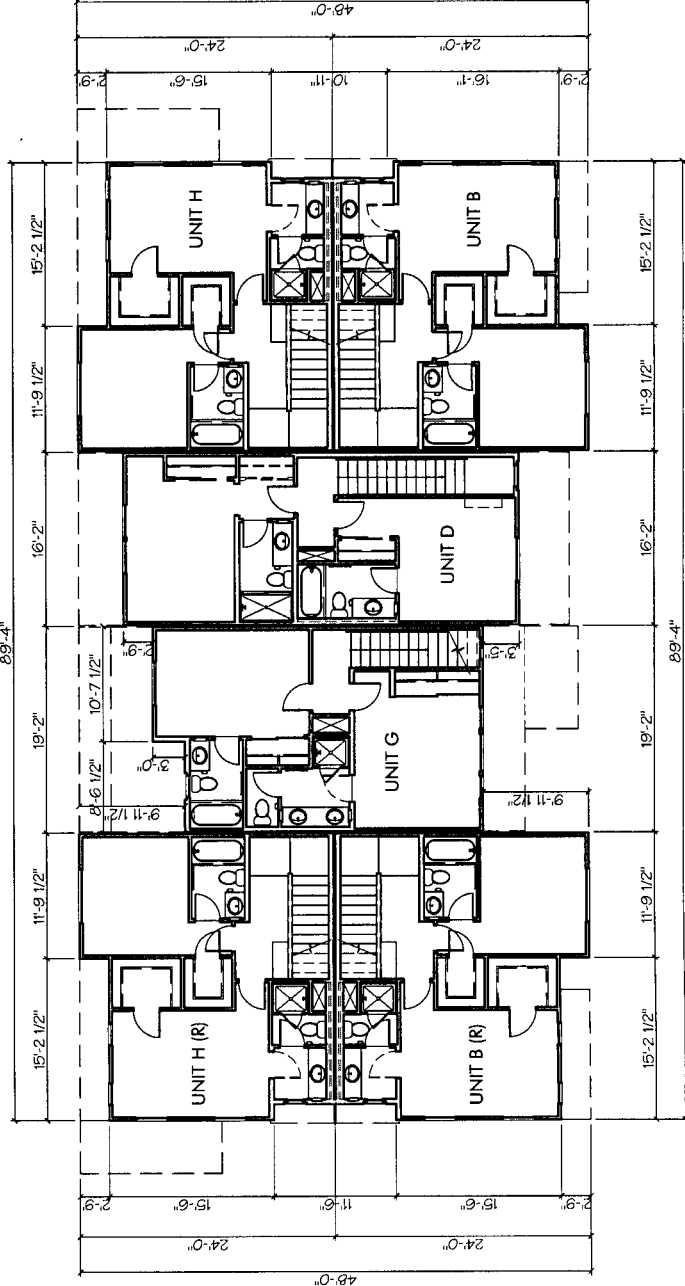
WARMINGTON HOMES CALIFORNIA

5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

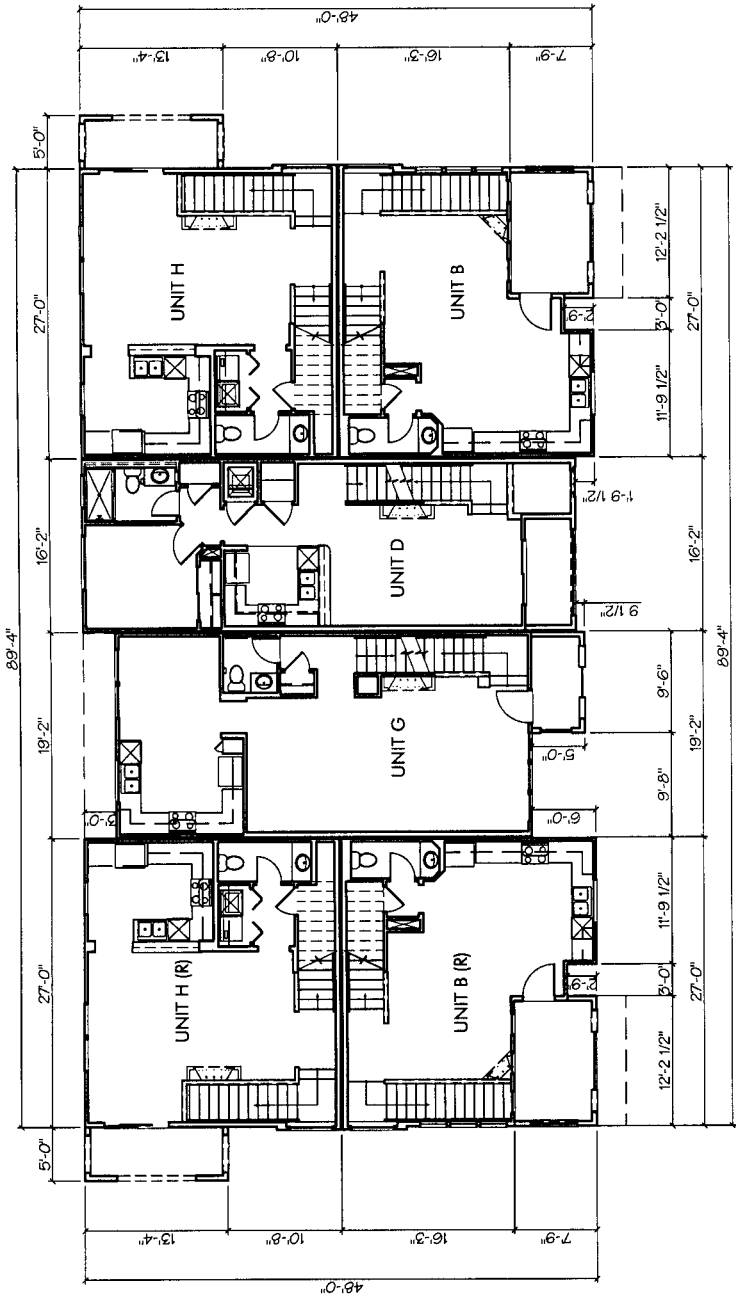
A-30



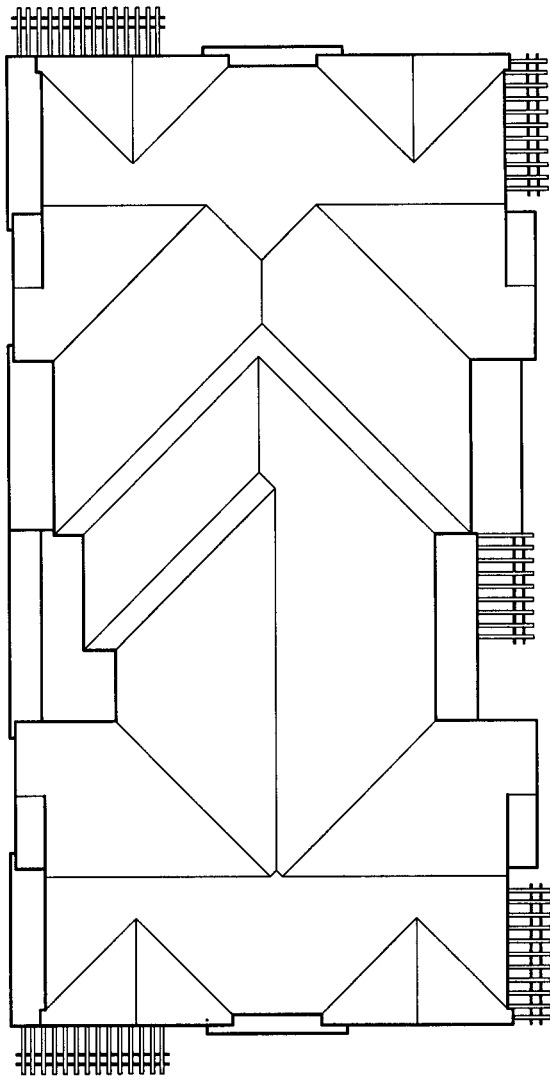
1ST FLOOR PLAN



3RD FLOOR PLAN



2ND FLOOR PLAN



ROOF PLAN

TOWNHOUSE PLANS  
- 6 UNIT BUILDING



DAHLIN GROUP

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

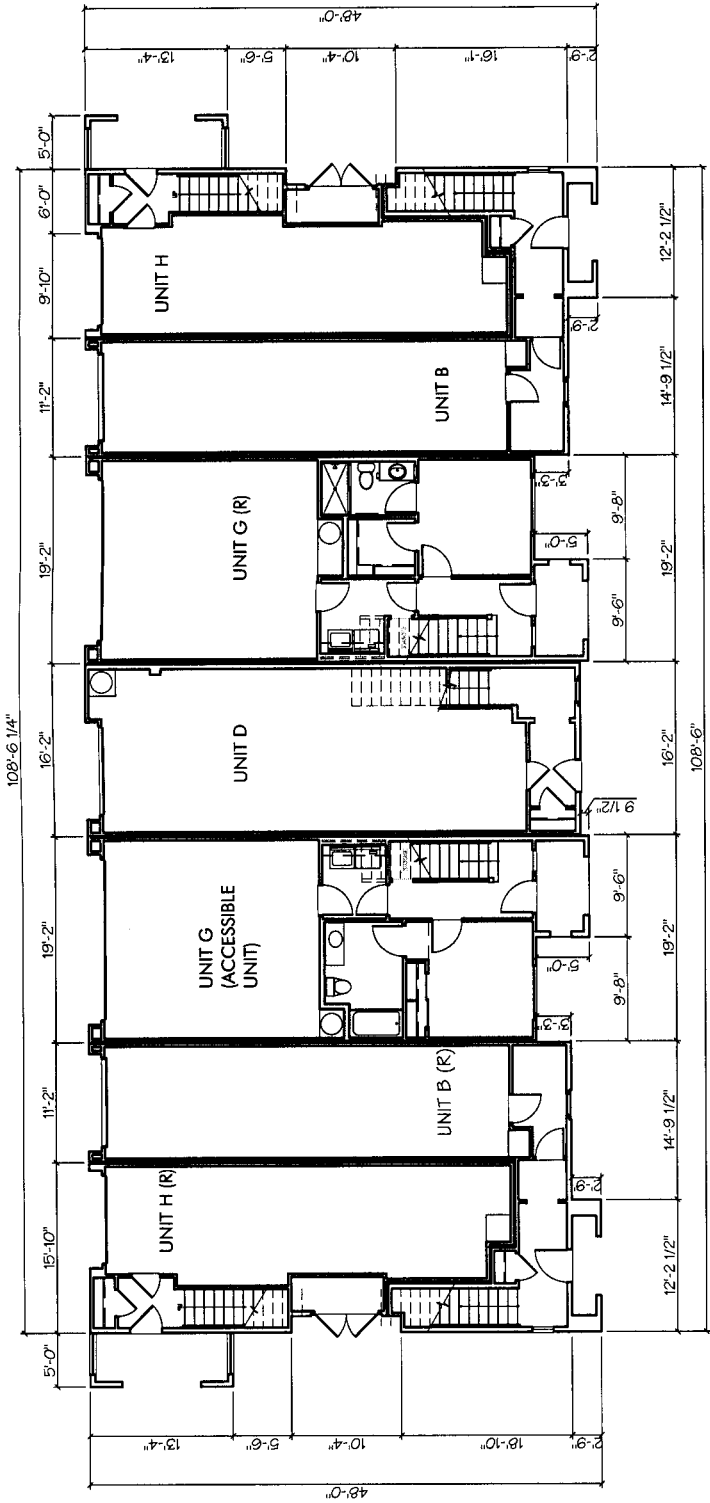
ESTRELLA MILPITAS, CALIFORNIA

WARMINGTON HOMES CALIFORNIA

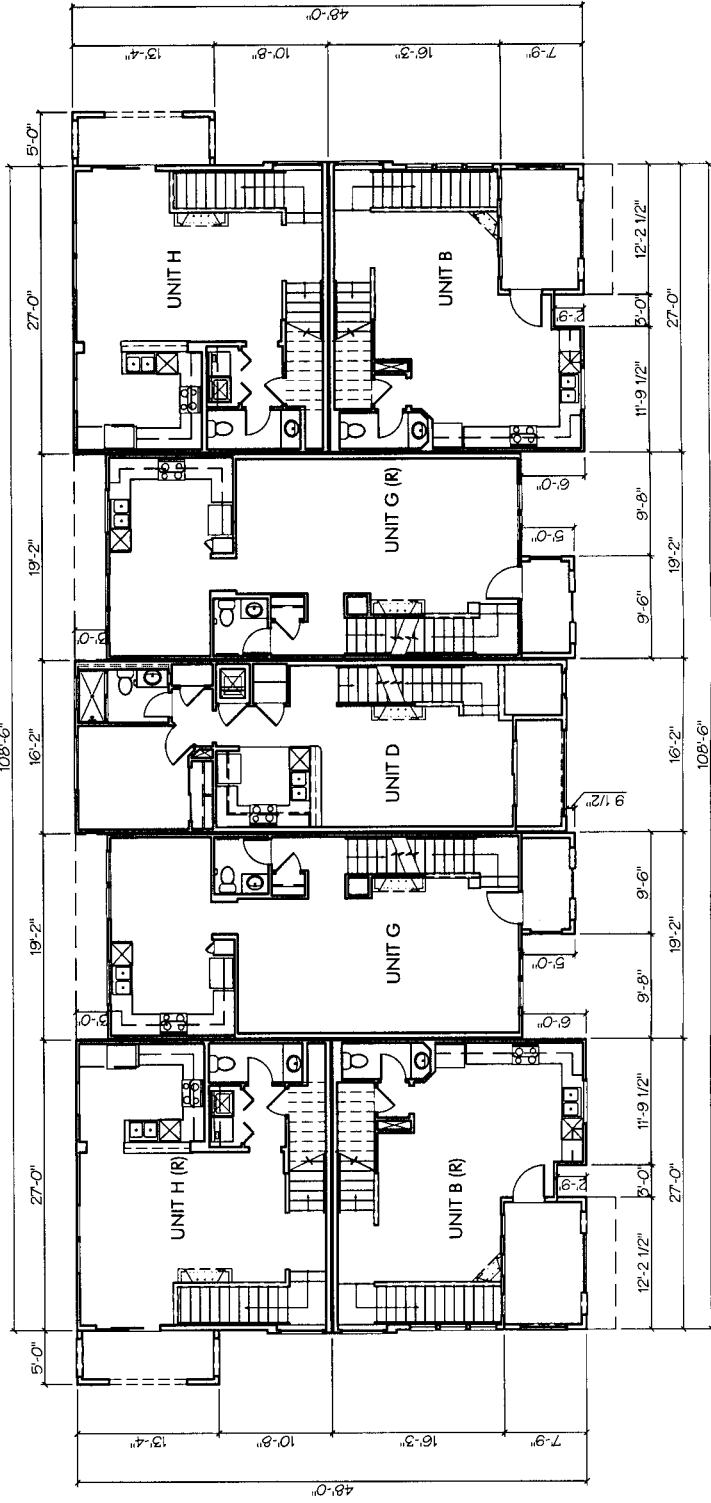
5865 Owens Drive  
Pleasanton, CA 94538  
925.251.7200  
925.251.7201 Fax



A-31

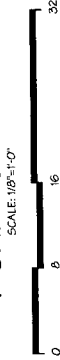


1ST FLOOR PLAN



2ND FLOOR PLAN

TOWNHOUSE PLANS  
- 7 UNIT BUILDING



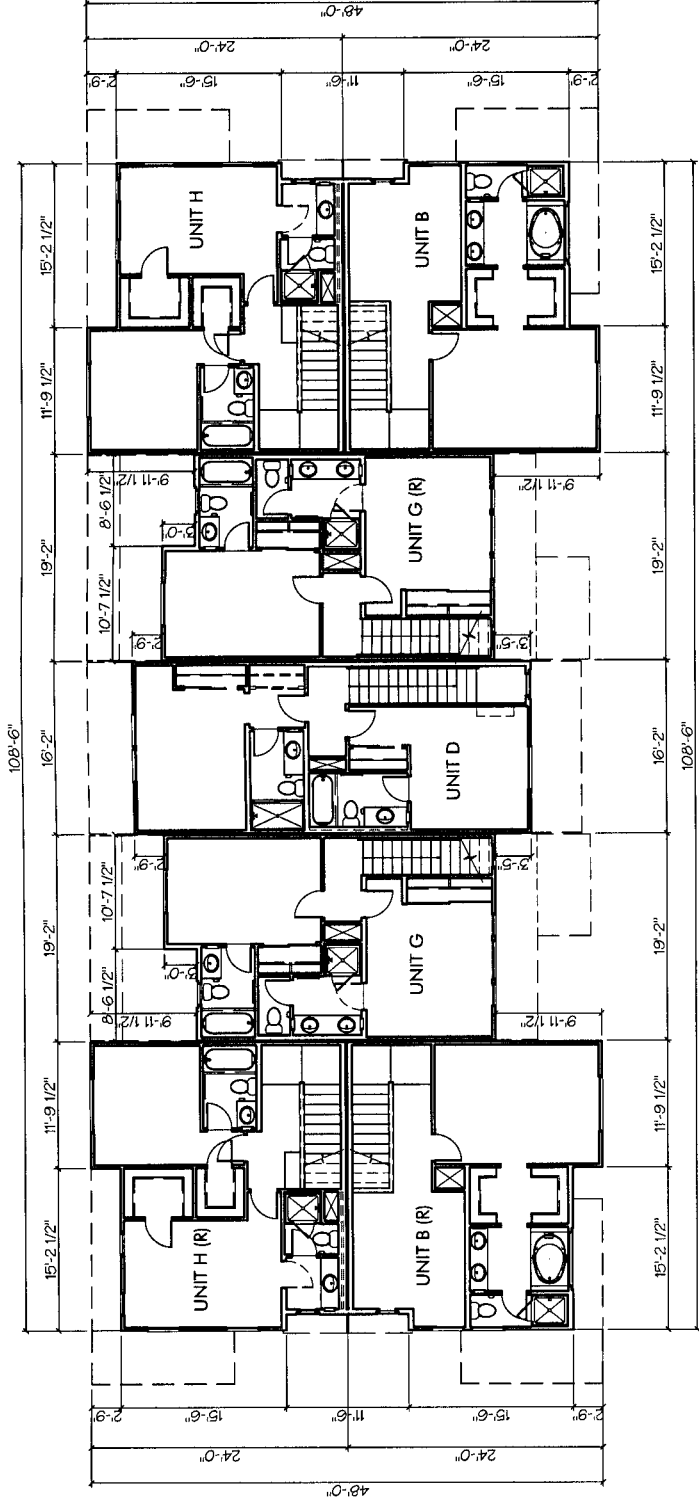
PROJECT NO.: 400.007  
DATE: MAR. 8TH, 2007

ESTRELLA MILPITAS, CALIFORNIA

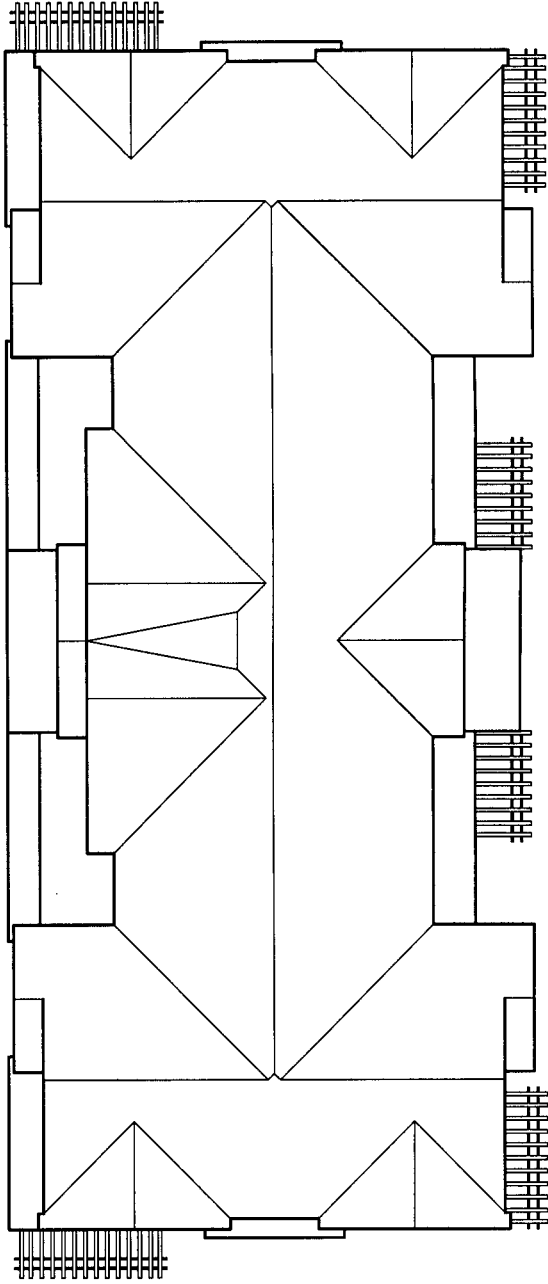
WARMINGTON HOMES CALIFORNIA

5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

A-32

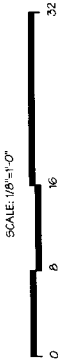


3RD FLOOR PLAN



ROOF PLAN

TOWNHOUSE PLANS  
- 7 UNIT BUILDING



DAHLIN GROUP

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

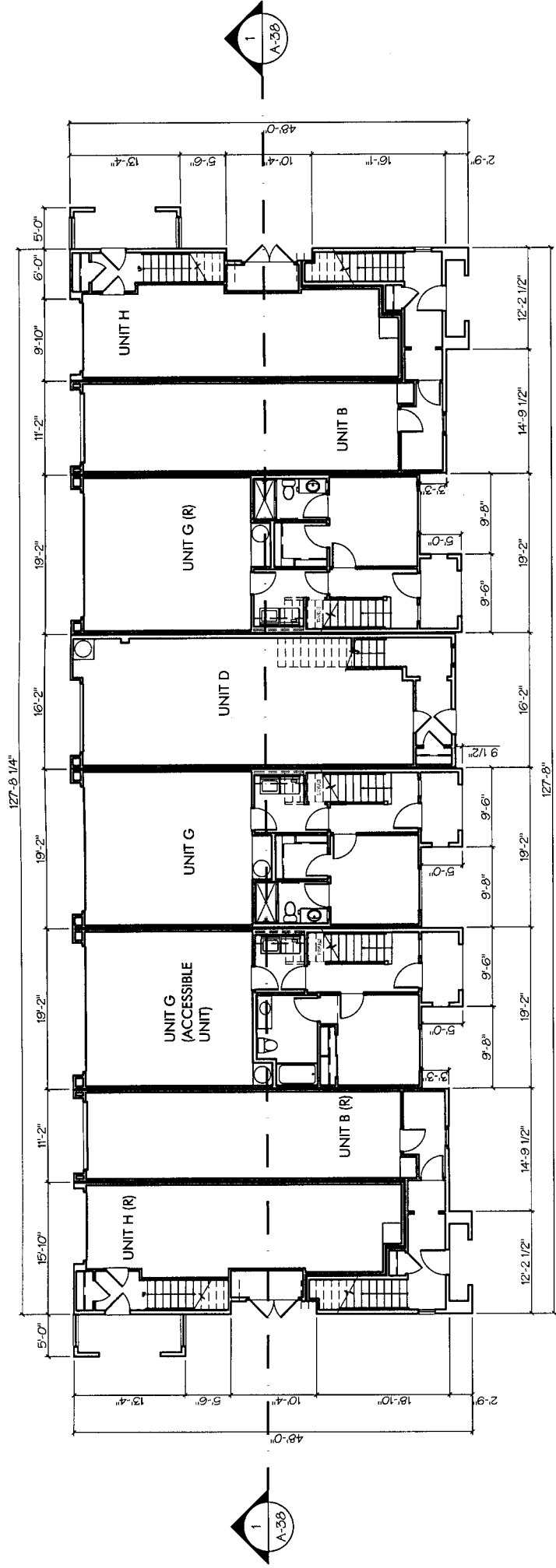
ESTRELLA MILPITAS, CALIFORNIA

WARMINGTON HOMES CALIFORNIA

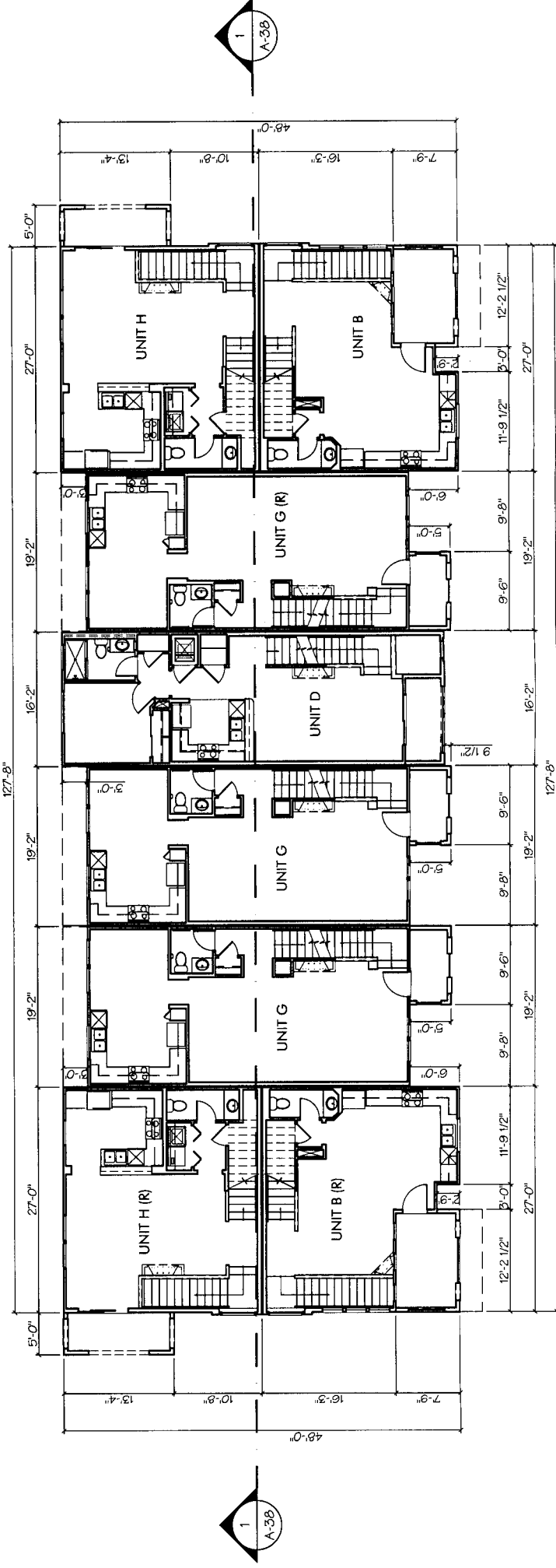
5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

A-33



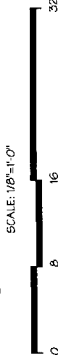


1ST FLOOR PLAN

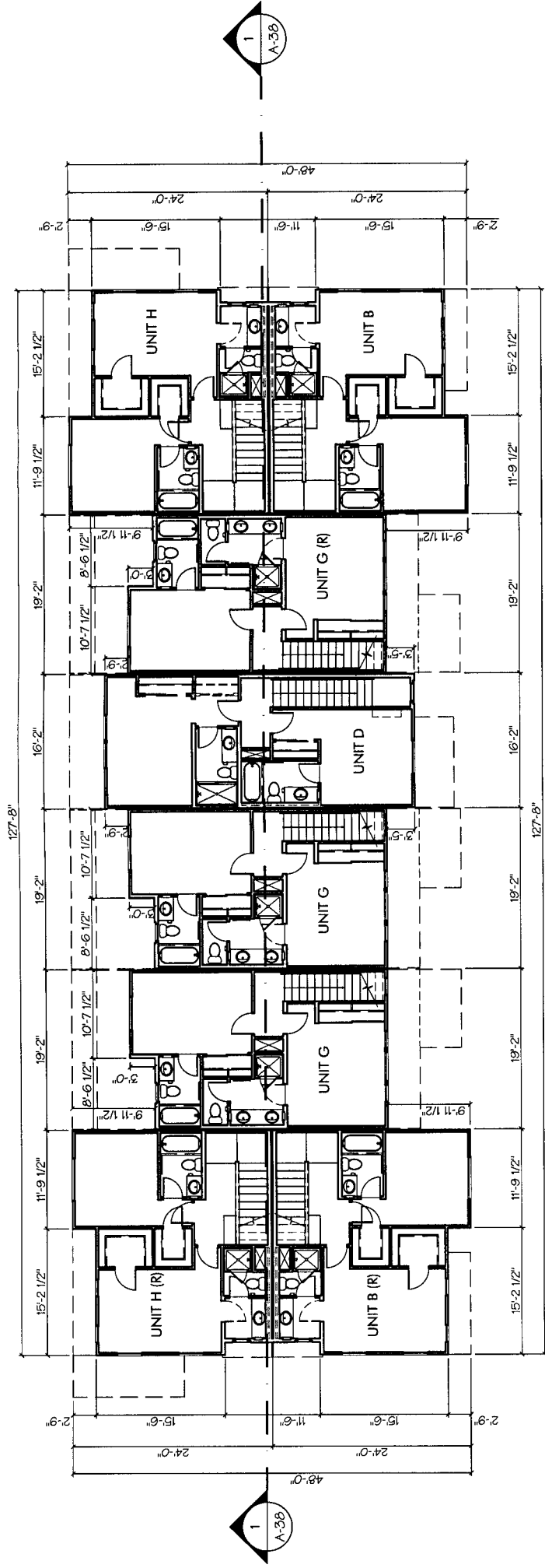


2ND FLOOR PLAN

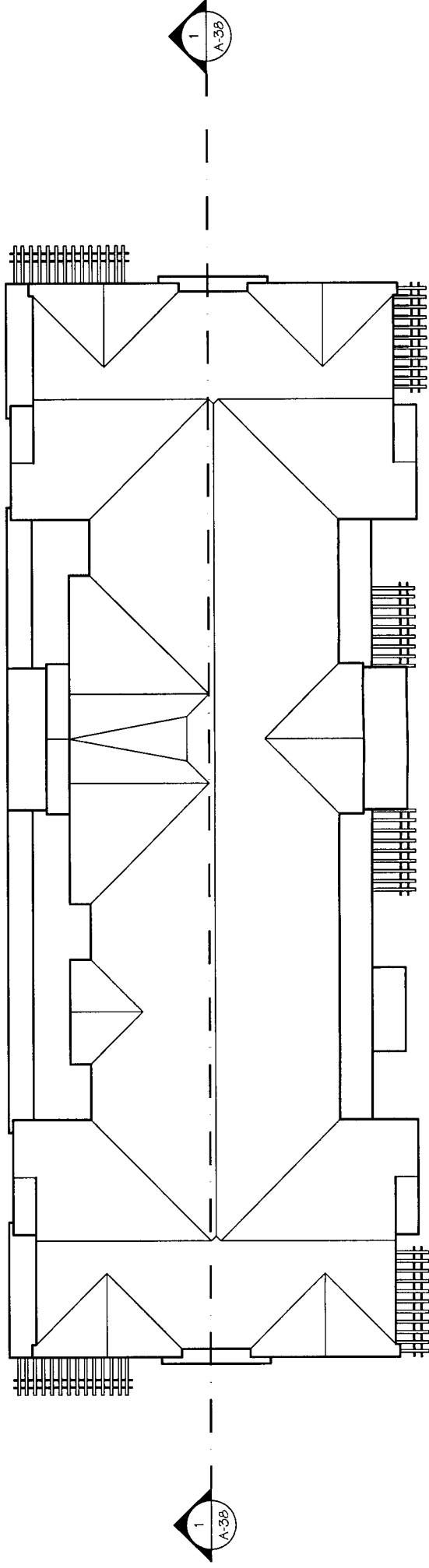
TOWNHOUSE PLANS  
- 8 UNIT BUILDING



5865 Owens Drive  
Placenton, CA 94588  
925.251.7200 Fax  
925.251.7201 Fax

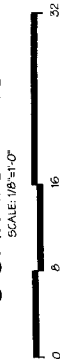


3RD FLOOR PLAN



ROOF PLAN

TOWNHOUSE PLANS  
- 8 UNIT BUILDING



DAHLIN GROUP  
ARCHITECTS

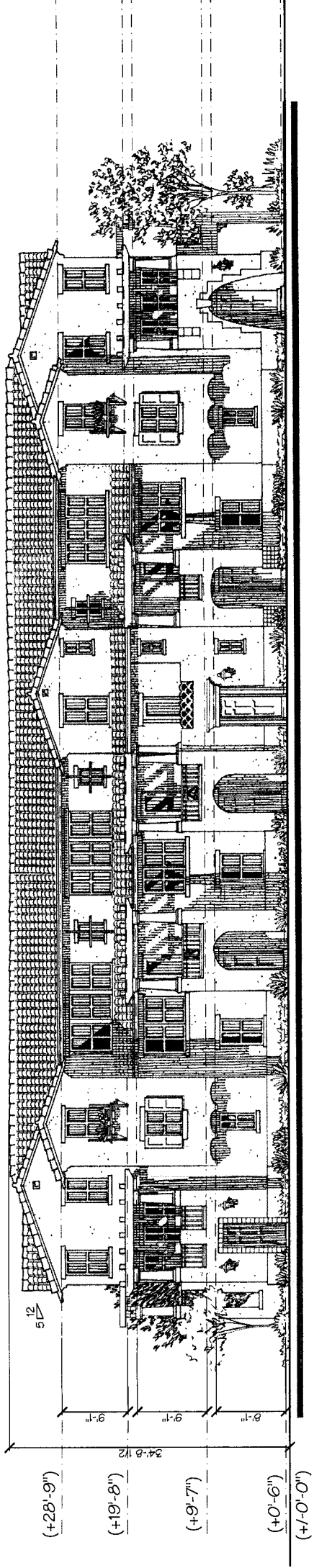
5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

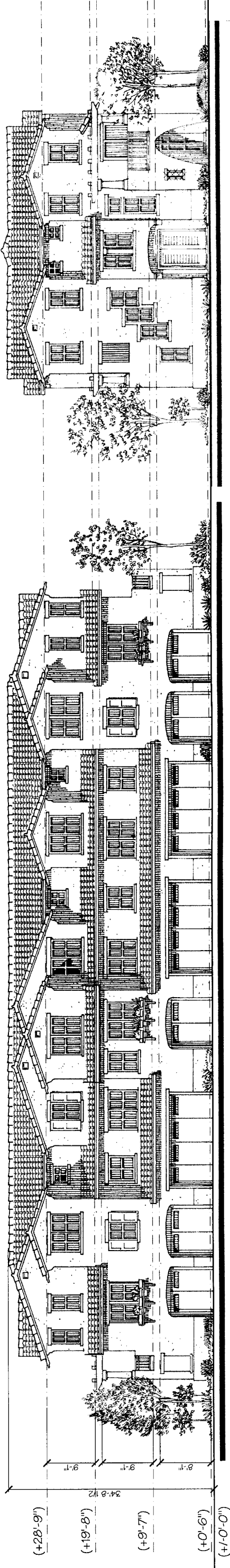
A-35

ESTRELLA MILPITAS, CALIFORNIA

WARMINGTON HOMES CALIFORNIA



FRONT ELEVATION



REAR ELEVATION

TYPICAL END ELEVATION

TOWNHOUSE ELEVATIONS  
- 8-UNIT BUILDING  
SCALE: 1/8"=1'-0"



DAHLIN GROUP

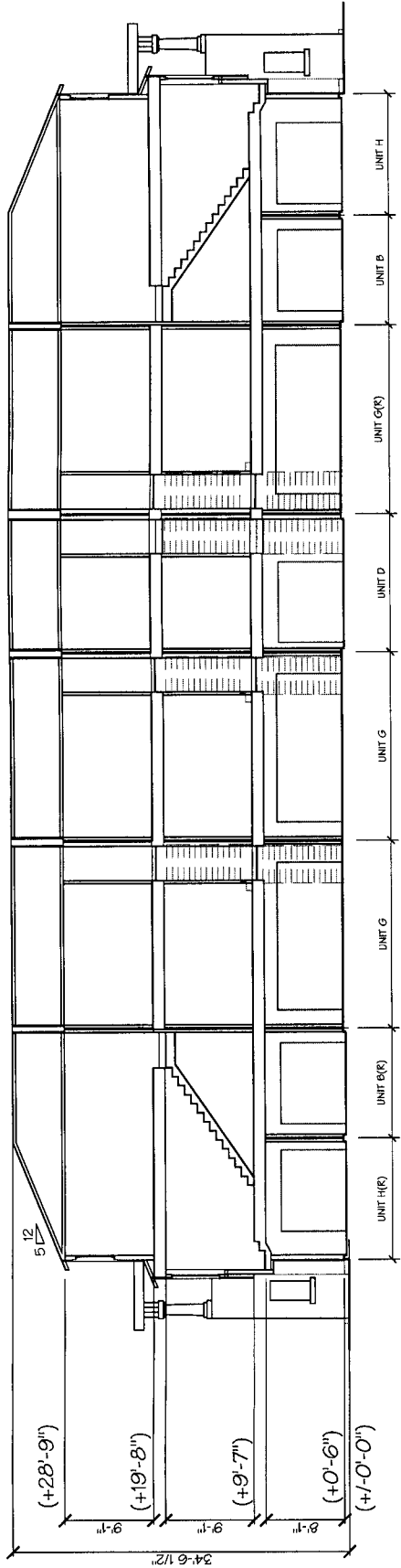
PROJECT NO.: 400.007  
DATE: MAR. 8TH, 2007

ESTRELLA MILPITAS, CALIFORNIA

WARMINGTON HOMES CALIFORNIA

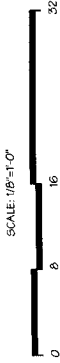
5845 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

A-36



BUILDING SECTION - 1

TOWNHOUSE SECTIONS  
- 8-UNIT BUILDING



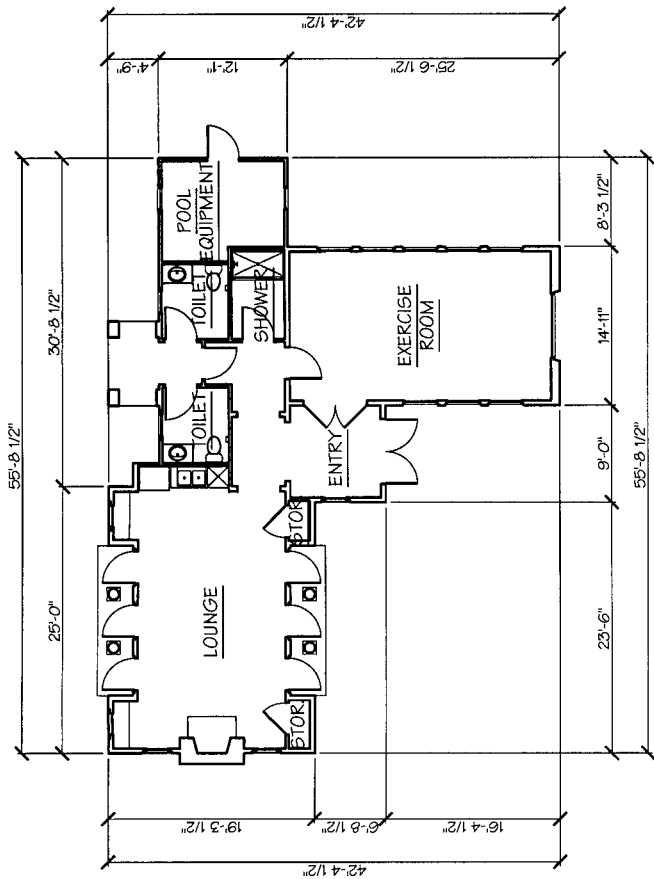
5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

ESTRELLA MILPITAS, CALIFORNIA

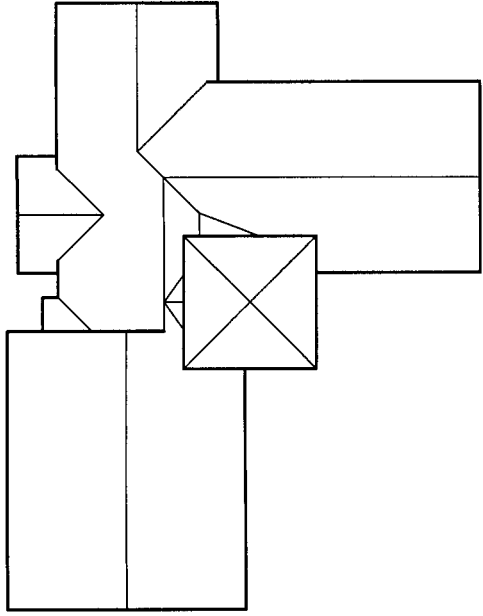
WARMINGTON HOMES CALIFORNIA

PROJECT NO: 400.007  
DATE: MAR. 8TH, 2007

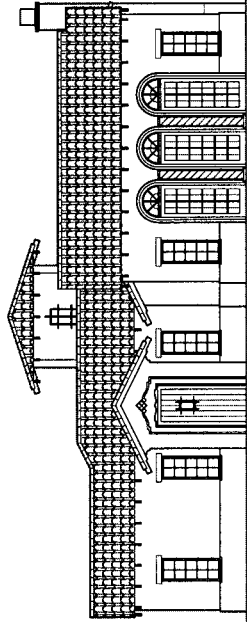
A-37



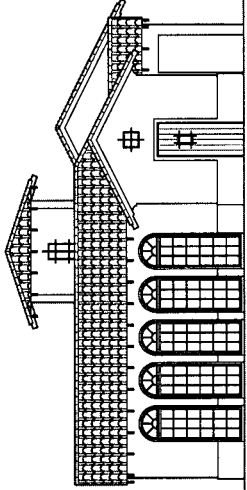
FLOOR PLAN



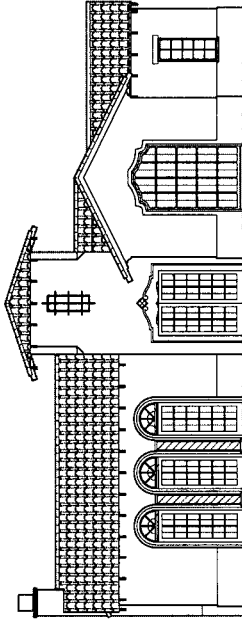
ROOF PLAN



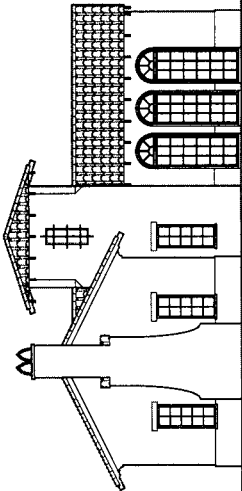
SOUTHWEST ELEVATION



NORTHWEST ELEVATION

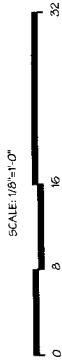


NORTHEAST ELEVATION



SOUTHEAST ELEVATION

POOL / REC. BUILDING  
PLANS AND ELEVATIONS



DAHILIN GROUP  
ARCHITECTS

5865 Owens Drive  
Pleasanton, CA 94588  
925.251.7200  
925.251.7201 Fax

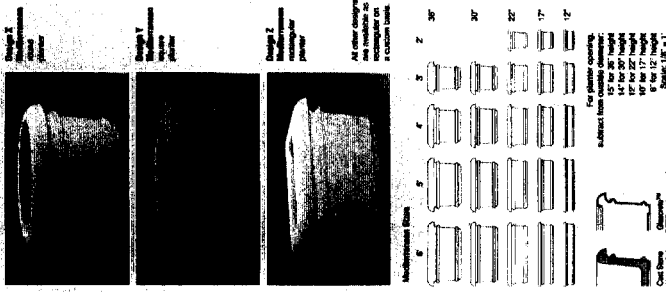






Concrete is a versatile material that can be used in a variety of ways. It can be used to create a variety of different shapes and sizes, and it can be used to create a variety of different textures. Concrete is a durable material that can withstand a variety of different conditions, and it can be used to create a variety of different colors. Concrete is a versatile material that can be used in a variety of ways.

**PODIUM FURNITURE** by Landscape Forms



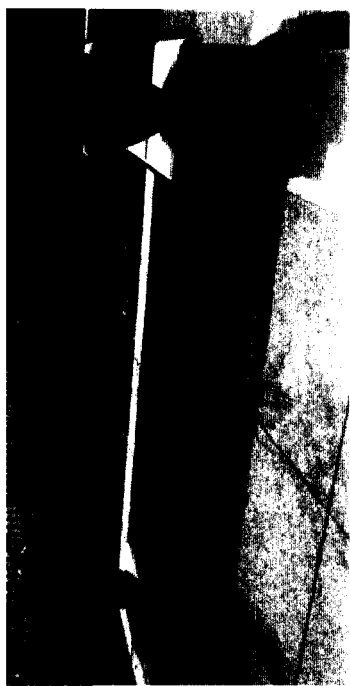
PODIUM POTS by Dura Art Stone



PODIUM PAVING & POOL DECK PAVING  
Stamped Concrete - Ashlar Slate Pattern



by Brickform



PODIUM PAVING / SEAT WALL  
Stamped Concrete Bands and Broom Finished Fields of Concrete  
Stucco Seat Wall with Precast Caps - Matching Pot Plths at Corners

DEVELOPER:  
WARMINGTON HOMES  
2070 CROW CANYON PL., STE 450  
SAN RAMON, CA 94585

LAND PLANNER

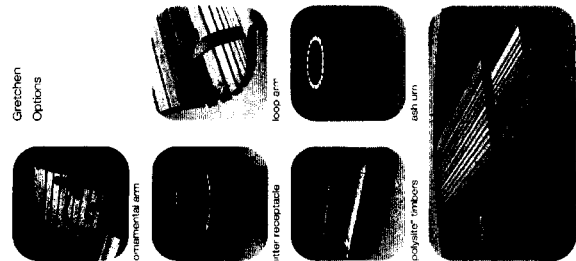


RANDALL PLANNING & DESIGN INC.  
Landscape Architecture \* Golf Facilities  
Site and Environmental Planning  
1475 N. Broadway Suite 290  
Walnut Creek, California 94596  
Office: (925) 934-8002  
Facsimile: (925) 934-8033



Concrete is a versatile material that can be used in a variety of ways. It can be used to create a variety of different shapes and sizes, and it can be used to create a variety of different textures. Concrete is a durable material that can withstand a variety of different conditions, and it can be used to create a variety of different colors. Concrete is a versatile material that can be used in a variety of ways.

**OPEN SPACE FURNITURE** by Landscape Forms



OPEN SPACE FURNITURE by Landscape Forms



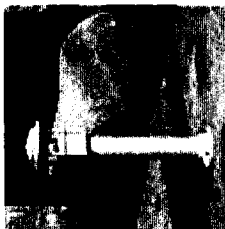
SOUNDWALL



by Sierra Precast



LTV Lightvault®  
by Kim Lighting



BNB Bounce Bollard



BE17 Small Era® Bell



AE21 Large Era® Acorn

SITE LIGHTING - ERA ACORN/BELL SERIES  
Era Acorn / Bell Series

Site Furnishings / Paving

# ESTRELLA

Milpitas, California

DATE: NOVEMBER 8, 2006

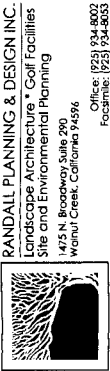
EVA PAVING - GRASS CRETE by Bominte





DEVELOPER:  
WARMINGTON HOMES  
2010 CROW CANYON PL., STE 450  
SAN RAMON, CA 94583

LAND PLANNER



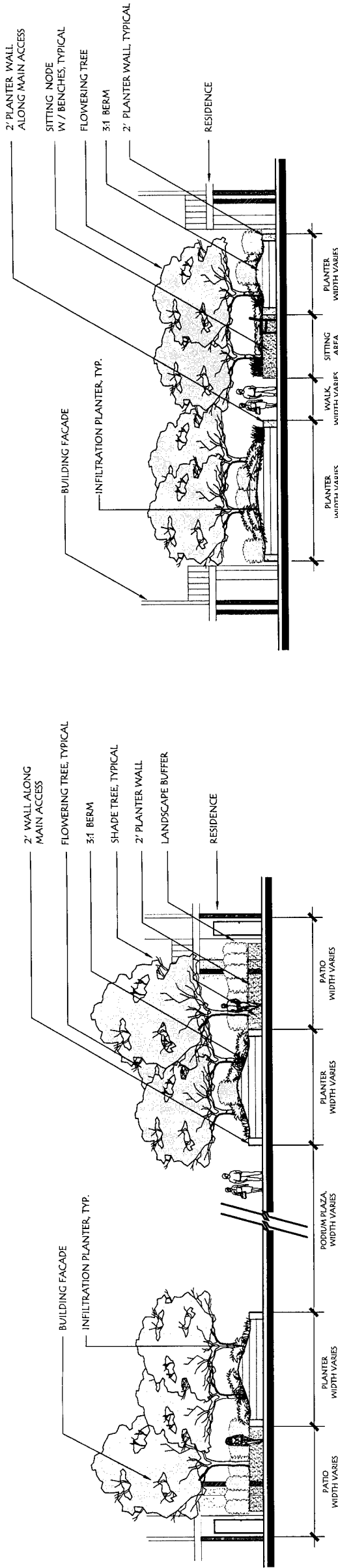
# ILLUSTRATIVE DETAILS

## ESTRELLA

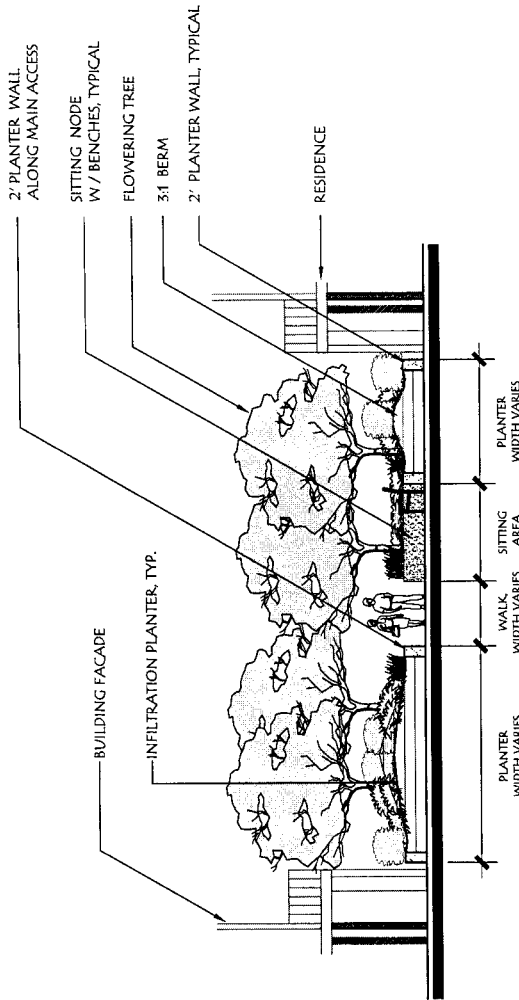
Milpitas , California

DATE: MARCH 8, 2007

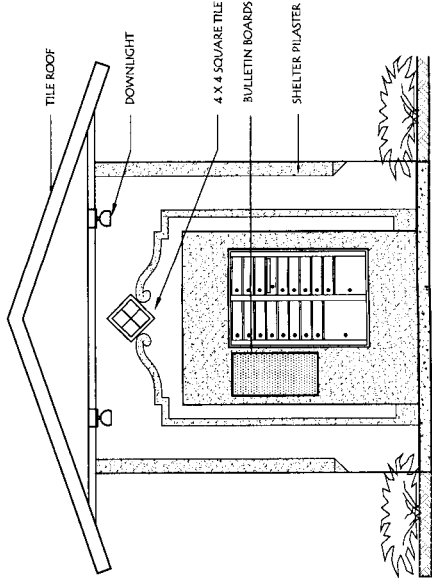
L-3



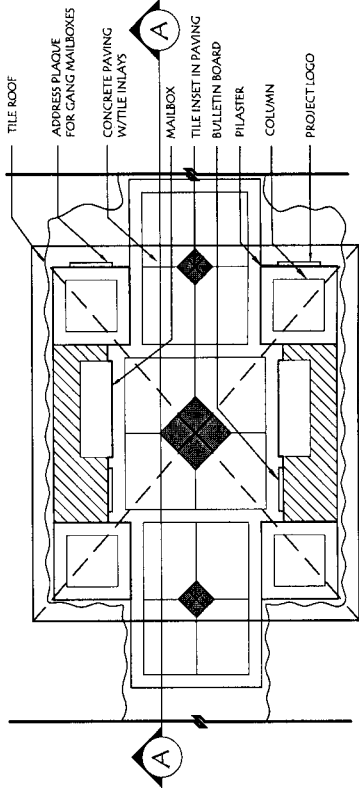
TYPICAL PODIUM SECTION A1-A2 - n.t.s.



TYPICAL PODIUM SECTION B1-B2 - n.t.s.

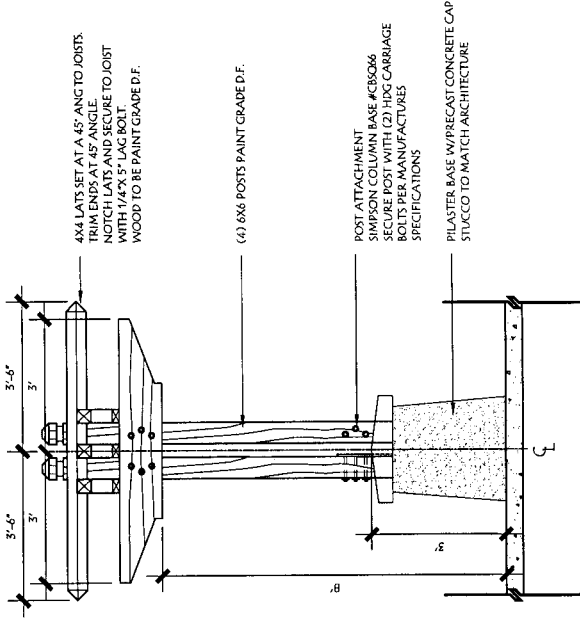


SECTION - A

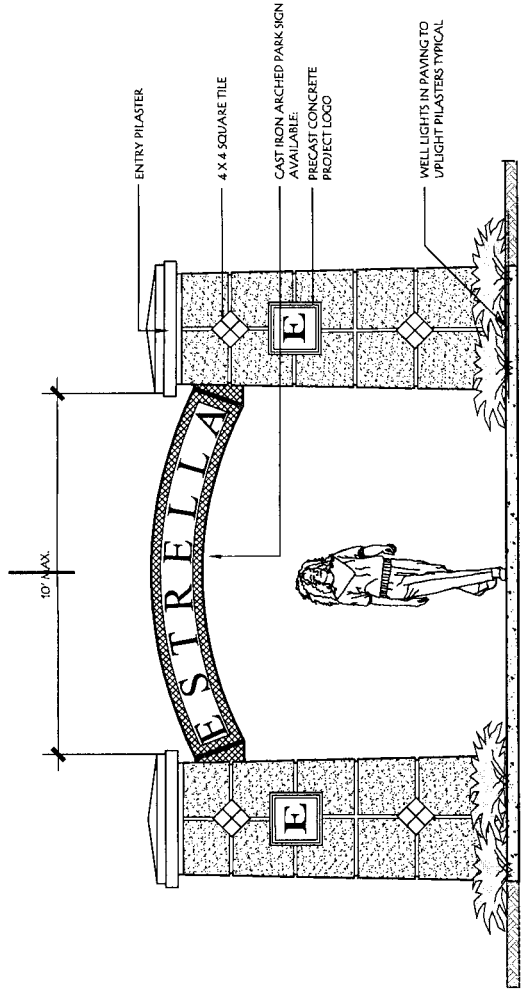


PLAN VIEW

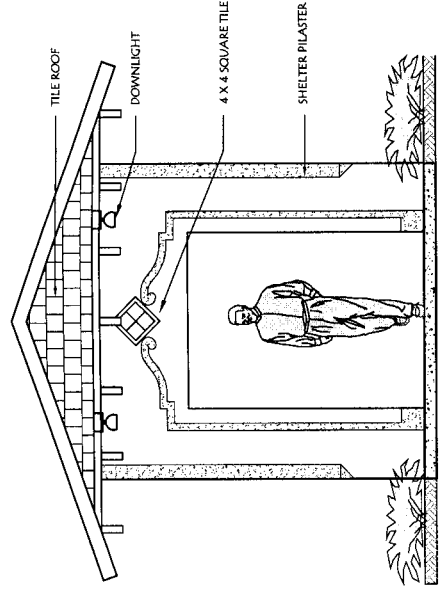
GANG MAILBOX 'BUILT-IN'



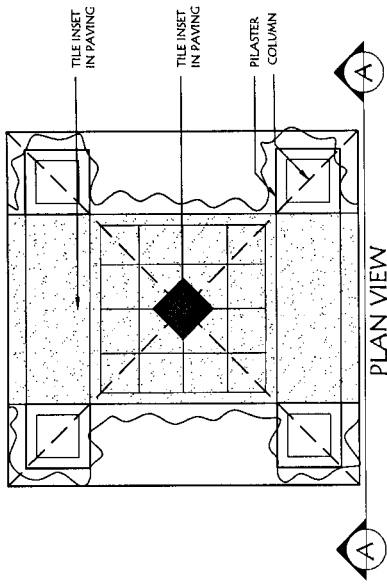
TRELLIS CONCEPT



PEDESTRIAN PROJECT ENTRY

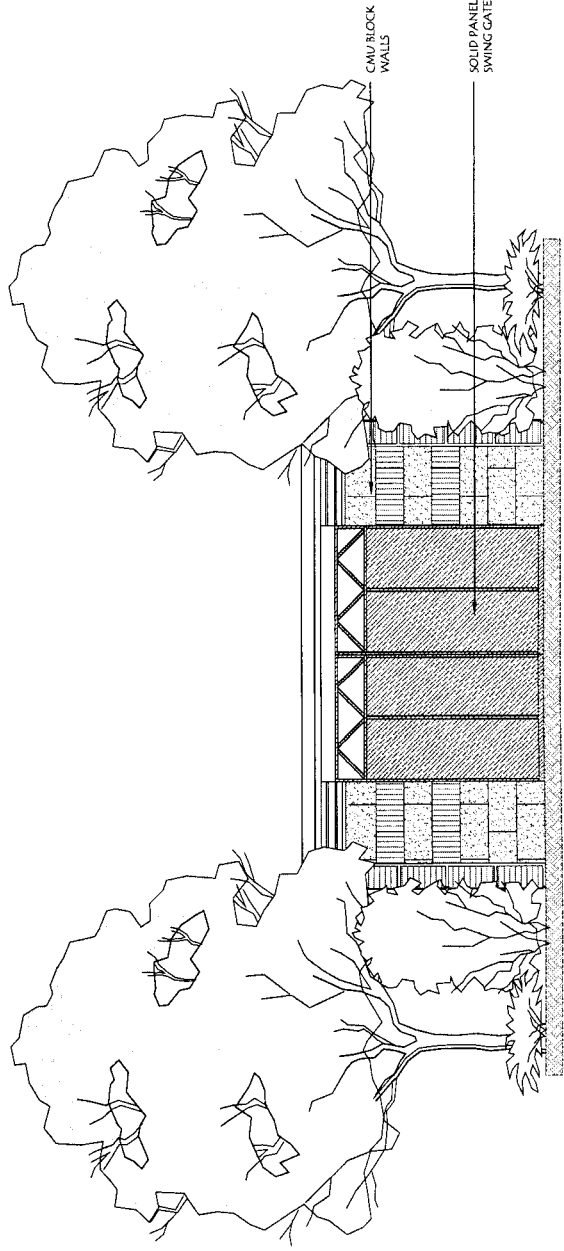
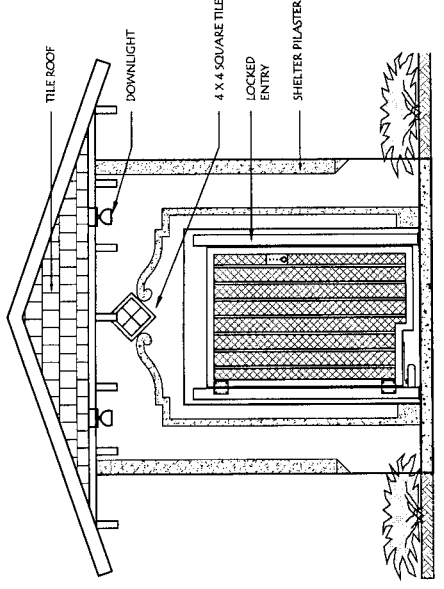


SECTION - A

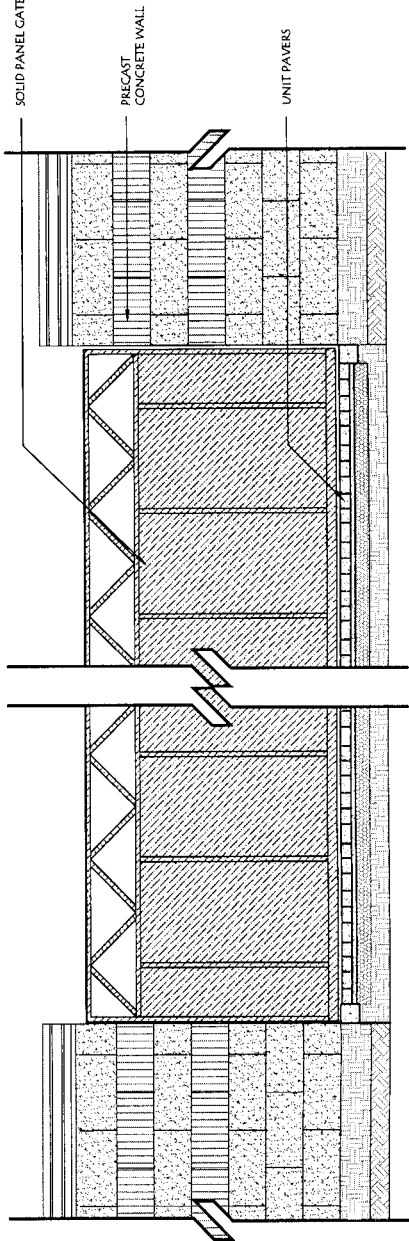


PLAN VIEW

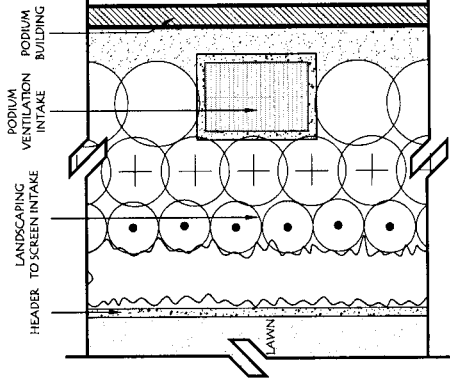
PASEO PEDESTRIAN ENTRY - n.t.s.



MAIN TRASH COLLECTION AREA - n.t.s.



SOLID PANEL GATE (AT TOWNHOMES EVA) - n.t.s.



TYPICAL PODIUM VENTILATION SCREENING

DEVELOPER:  
WARMINGTON HOMES  
2010 CROW CANYON PL., STE 450  
SAN RAMON, CA 94585

LAND PLANNER



## ILLUSTRATIVE DETAILS

# ESTRELLA

Milpitas , California

DATE: MARCH 8, 2007

# **STORMWATER C3 REPORT**

Date: April 2, 2007

For

***ESTRELLA RESIDENTIAL***

Milpitas, California

Developer:

***WARMINGTON HOMES CALIFORNIA***

*2010 Crow Canyon Pl., Suite 450*

*San Ramon, CA 94583*

*925-866-6700*

Contact Person: Donna Vingo

Engineer:

***RUGGERI-JENSEN-AZAR & ASSOCIATES***

*8055 Camino Arroyo*

*Gilroy, CA 95020*

*408-848-0300*

Contact Person: Jorge Duran

## ESTRELLA RESIDENTIAL PROJECT

### STORMWATER C3 REPORT

April 2, 2007

- The project will utilize existing storm drainage facilities at major storm drain connection points. The existing storm drain system within the site will be removed.
- No current BMP's are present at the site. All new project BMP's incorporated will be a net improvement to existing downstream water quality levels.
- The new project will have a NET reduction in impervious areas. The new project will introduce a larger amount of pervious areas from the current site condition.
- The design of storm water collection and conveyance systems will minimize erosion and other potential problems for on-site and adjacent properties.
- On-site areas of impervious surfaces in the residential areas will be minimized where possible to reduce runoff.
- The project residential design includes active and passive open spaces, thereby helping to minimize increases in impervious surfaces and associated site runoff.
- Educational flyers and other materials will be supplied to the residential users to increase their understanding of water quality and best management practices.
- The project will include storm drain system signs or stenciling with language to discourage illegal dumping of unwanted materials into the catch basins and field inlets.
- The project Homeowners' Association will provide information and instructions to potential project residents (original owners and transfer owners) before paperwork is finalized on their homes, regarding water quality, Best Management Practices.
- Public Education/Participation activities. The Homeowners' Association will provide information to new project residents regarding pollution prevention.
- The project CC&R's will include provisions for private street, parking lot and storm drain maintenance activities. These activities control the

## ESTRELLA RESIDENTIAL PROJECT

### STORMWATER C3 REPORT

April 2, 2007

movement of pollutants and removal of them from the pavement through catch basin cleaning, storm drain flushing, street sweeping, and by regularly removing illegally dumped material from the project site.

- The project CC&R's will include requirements for the Homeowners' Association to implement the following measures within any common landscaping and open space areas;
  - a) Materials Use Controls, which include good housekeeping practices (storage, use and cleanup) when handling potentially harmful materials, such as cleaning materials, fertilizers, paint, and where possible using safer alternative products;
  - b) Material Exposure Controls, which prevent and reduce pollutant discharge to storm water by minimizing the storage of hazardous materials (such as pesticides) onsite, storing materials in a designated area, installing secondary containment, conducting regular inspections, and training employees and subcontractors;
  - a) Material Disposal and Recycling, which includes storm drain system signs and stenciling with language to discourage illegal dumping of unwanted materials. The Homeowners' Association will notify project residents of household hazardous waste and used oil recycling.

#### ***D. Stormwater Quality Control Constraints:***

- To maximize the use of the site and meet the City's minimum parking requirements, the project is covering a greater portion of the site with new roof and paving. However, architectural design has been incorporated to allow for open areas inside the larger podium buildings to reduce roof areas and increase landscape areas.
- The topography of the site is difficult to achieve an adequate road design with overland release, and without compromising boundary conditions that would make the project impossible.
- Certain soil conditions in the site are not completely allow for an efficient infiltration system. The low permeability and high clay content make it undesirable for creating "wet" conditions or infiltration.
- Certain portions of the site along all perimeter boundaries, although landscape areas, will not be used as BMP areas because of grading and

## ESTRELLA RESIDENTIAL PROJECT

### STORMWATER C3 REPORT

April 2, 2007

conform constraints. Portions along the boundary perimeter will either require slopes to steep to collect water, or will require conform criteria to preserve existing natural resources such as trees and existing topography.

#### ***E. Hydrograph Modification Management Requirements:***

- Based on Fig. 8.1 of the City of Milpitas Stormwater C.3 Guidebook, this project will not be required to create a Hydrograph Modification Management Plan.

## **II. METHODS TO LIMIT IMPERVIOUS SURFACES**

### ***A. Site Design Features***

The project will limit the amount of impervious surfaces by implementing the following in the site design:

- The site is densely developed with a site design maximizing the use of natural features and irregular shaped project boundary.
- The site design minimizes the use of roads. Alley driveways are used to service townhome units. These alley driveways end at each block; reducing the need to design interconnected alley systems, which would require additional paved surfaces. Alley driveways are also typically narrower than main entry roads.
- The site incorporates dual use roads. The project will design a landscape/emergency road dual use area; serving as drivable road surface for emergency vehicle as well as a bio-retention treatment area.
- The site is developed to maximize density and includes 3 multi-story podium buildings. The site also includes 16 multi-story townhome buildings. The number of parking spaces is near the minimum allowed by the city.
- The podium buildings will have underground parking, reducing the amount of surface-exposed parking that produce runoff.
- The site design incorporates sizable open space and landscape areas through out the site that will be used as either vegetated treatment swales, bio-retention areas, or natural ground landscape areas. The site design will also achieve preserving natural resources around the west boundary.

## ESTRELLA RESIDENTIAL PROJECT

### STORMWATER C3 REPORT

April 2, 2007

- The podium building design incorporates internal open space landscape areas as well as terraced landscaped areas along side portions of the buildings that offer bio-retention treatment opportunities.

#### ***B. Measures to Limit Directly Connected Impervious Areas***

The project will use the following ways to achieve water storm water quality.

Selection of Paving Materials – Conventional asphalt paving will be used on the site. Permeable pavements are not practical for the site because of the presence of expansive soils. Alternate pavement design is being used in the emergency vehicle access road that will involve not paving a traditional road width. Instead, two 6 ft paths, separated by turf block, will be paved to allow typical wheel base travel of emergency vehicles. This area will also be used by heavier garbage trucks, where permeable pavements are undesirable because of heavy vehicle use.

Vegetated/Bio-swale Areas – Vegetated/Bio-swales in landscape areas will be used through out the site wherever possible. Landscaped paseo areas between townhome buildings offer good opportunities for incorporating landscaped areas into vegetated areas that can collect surface and roof runoff for 50 percent of buildings. Roof water will be diverted to vegetated/Bio-swale areas through either splash block and surface bubblers at specific locations beyond the face of buildings. Through the use of surface grading, low points can be created that will allow surface flow of water through vegetated areas. Bio-swales will also be achieved by introducing specific grading mix in trench areas that will allow for isolated infiltration in water collection areas. French drains will also be used in combination with vegetated swales to increase the water quality opportunities.

Vegetated/Bio-swale areas will also be used in treating the recreation building. Surrounding landscaped areas around the recreation building offer wide areas for grading and collecting impermeable surfaces related to the recreation facility.

Vegetated Swale Areas – Vegetated swale areas will be primarily used collecting surface runoff from patio and hardscape impermeable surfaces. Most of these areas consist of open air exposed areas inside the podium buildings where direct rainwater onto the impermeable surfaces will run to adjacent landscape areas. Isolation of these impermeable areas is a direct part of the landscape design.

# ESTRELLA RESIDENTIAL PROJECT

## STORMWATER C3 REPORT

April 2, 2007

### III. DESCRIPTION OF TREATMENT AREAS

As shown in the stormwater control plan exhibit (attachment 6), the following is a description of the various treatment areas and methods used. As summary of square footage and percentages are also shown in the stormwater control plan.

**Area 1 – Vegetated / Bio-Swale Treatment Areas.** Area 1 (attachment 1) totals 83,644 sqf or 17.2 % of the total site area. These areas will receive and treat roof waters from both townhome and podium buildings. Approximately 50% of the townhome roof area and 30% of the podium roof area will be drained into the Area 1 treatment areas. An approximate 80,406 sqf of roof area will drain into the total available 83,644 sqf of available Area 1 treatment area.

The vegetated / Bio-Swale treatment areas will use grading methods to establish surface flow through grassy swale areas. Length of buildings and paseo areas will be maximized surface water flow in grassy swales. Additionally, incorporated in these areas will be a combined use underground bio-swale through use of French drains or trench soil mix that will allow for underground water collection after percolation. French drain or perforated pipe water collection will eventually be connected to hard pipe storm drain systems running along the main street.

For podium buildings, a terraced landscape design running along one side of the entire building will be used in a similar manner as the vegetated / bio-swales in the paseo townhomes. The terraced landscaped areas, however, will take advantage of the elevation difference between terraced landscaped areas to promote water quality. The terraced landscape design is an example of using elevation constraints for the benefit of water quality opportunities.

**Area 2 – Roof Areas Draining to Self Retention / Bio-Swale Areas.** Area 2 (attachment 2) totals 81,711 sqf or 16.8% of the total site area. These areas are roof waters that will drain into an available 83,644 sqf vegetated / bio-swale area.

**Area 3 – Vegetated Treatment Areas.** Area 3 totals 84,947 sqf or 17.5% of the total site area. These areas will receive and treat water mostly from hardscape-impermeable surfaces immediately adjacent and within the Area 3 boundary shown. Out of the 84,947 sqf total area, approximately 46,600 sqf is non-pervious or 54.8%. Said another way 45.1% of the total Area 3 is used for water treatment.

**Area 4 – Mechanical Filter Treatment Areas.** Area 4 (see attachment 3) totals 189,930 sqf or 39.0% of the total site area. This area includes approximately 72,305 sqf (49.0%) of the total 147,314 sqf podium footprint areas. Area 4 also includes street pavement runoff. Area 4 water, will eventually combine with after



## ESTRELLA RESIDENTIAL PROJECT

### STORMWATER C3 REPORT

April 2, 2007

treatment runoff from Areas 1-5, and will be passed through two mechanical treatment units before discharge to the public storm drain system. The mechanical treatment units will be designed to achieve quality treatment of the untreated water. Technological advances in mechanical treatment offer exceptional water quality treatment options.

**Area 5 – Natural Ground / Landscape Areas.** Area 5 totals 46,000 sqf or 9.5% of the total site area. These areas will be open landscape-private open space. As mentioned above, because of either grading or conform constraints, these areas will not be used for water treatment. However, the landscaping design in these areas will either be heavy vegetation (i.e. Because of slope stability) or are large open areas will offer natural surface flow.

#### **IV. SOURCE CONTROL MEASURES**

The following items listed for this project have the potential to allow for pollutants to enter the storm drain system:

Potential Sources	Permanent BMP	Operational BMP
Drain Inlets	<ul style="list-style-type: none"><li>• The majority of the site will drain to Landscape treatment areas to reduce the amount of contamination.</li><li>• All storm water leaving the site will be treated by a mechanical storm water filtration unit (see attachment 3).</li><li>• All inlets will be marked with “No dumping Drains to Bay” or similar message.</li></ul>	<ul style="list-style-type: none"><li>• Landscape treatment areas will be inspected and maintained on a regular basis to ensure proper function.</li><li>• Storm water filtration units will be inspected and maintained on a regular basis to ensure proper function.</li><li>• All residents will receive storm water pollution prevention information to be provided by the City.</li></ul>
Washing of Cars	<ul style="list-style-type: none"><li>• Car washing will be prohibited</li></ul>	
Interior Parking Garages	Any floor drains in the parking garages will drain to the sanitary sewer system.	Drains will be inspected and maintained on a regular basis to ensure proper function.

## ESTRELLA RESIDENTIAL PROJECT

### STORMWATER C3 REPORT

April 2, 2007

Outdoor Pesticide Use	<ul style="list-style-type: none"><li>• Where possible, pest resistant plants will be used.</li><li>• Planting for swales will be selected to be appropriate for the soil and moisture conditions</li></ul>	<ul style="list-style-type: none"><li>• Landscaping is to be maintained using integrated pest management principles with minimal or no use of pesticides.</li></ul>
Garbage Compactor Areas	<ul style="list-style-type: none"><li>• All dumpsters will be marked with "Do not dump hazardous materials here" or similar.</li><li>• Garbage areas to be graded to prevent run on to the area.</li><li>• Garbage area in the podium buildings shall have floors sloped to prevent drainage to exterior. All floor drains must be connected to the sanitary sewer system.</li></ul>	<ul style="list-style-type: none"><li>• Adequately sized receptacles will be provided. Grounds keeping crew or contractor will inspect and clean up daily. Spills will be cleaned up using dry methods.</li></ul>
Patios and Walkways	All areas will drain to landscape treatment areas before entering the storm drain system.	
Fire Sprinklers	Sprinkler tests will drain to landscape treatment areas before entering the storm drain system.	

#### V. PERMITTING AND CODE COMPLIANCE

There are no known conflicts between the proposed stormwater control plan and the City of Milpitas ordinances or policies.

#### VI. BMP OPERATION AND MAINTENANCE

##### *A. Means to Finance and Implement BMP Maintenance*

Proper maintenance and operation of stormwater management facilities will be the responsibility of the HOA to be established under this project. All necessary forms or agreements will be established between the City and developer during the course of final completion of the stormwater control plan.

## ESTRELLA RESIDENTIAL PROJECT

### STORMWATER C3 REPORT

April 2, 2007

#### ***B. Summary of Maintenance Requirements***

Swales and storm water planters remove pollutants primarily by filtering runoff slowly through an active layer of soil. Routine maintenance is needed to insure that flow is unobstructed, that erosion is prevented, and that soils are held together by plant roots and are biologically active. Typical routine maintenance consists of the following:

- Inspect inlets for channels, exposure of soils, or other evidence of erosion. Clear any obstructions and remove any accumulation of sediment. Examine rock or other material used as a splash pad and replenish if necessary.
- Inspect outlets for erosion or plugging.
- Inspect side slopes for evidence of instability or erosion and correct as necessary.
- Observe soil in the swale or planter for uniform percolation throughout. If portions of the swale or filter do not drain within 48 hours after the end of a storm, the soil should be tilled and replanted. Remove any debris or accumulation of sediment.
- Confirm that any check dams and flow spreader are in place and level and that channelization within the swale or filter is effectively prevented.
- Examine the vegetation to insure that it is healthy and dense enough to provide filtering and to protect soils from erosion. Replenish much as necessary, remove fallen leaves and debris, prune large shrubs or trees, and mow turf areas. Confirm that irrigation is adequate and not excessive. Replace dead plants and remove invasive vegetation.
- Abate any potential vectors by filling holes in the ground in and around swale and by insuring that there are no areas where water stands longer than 48 hours following a storm. If mosquito larvae are present and persistent, contact the Santa Clara County Vector Control District for information and advice. Mosquito larvicides should be applied only when absolutely necessary and then only by licensed or contractor.

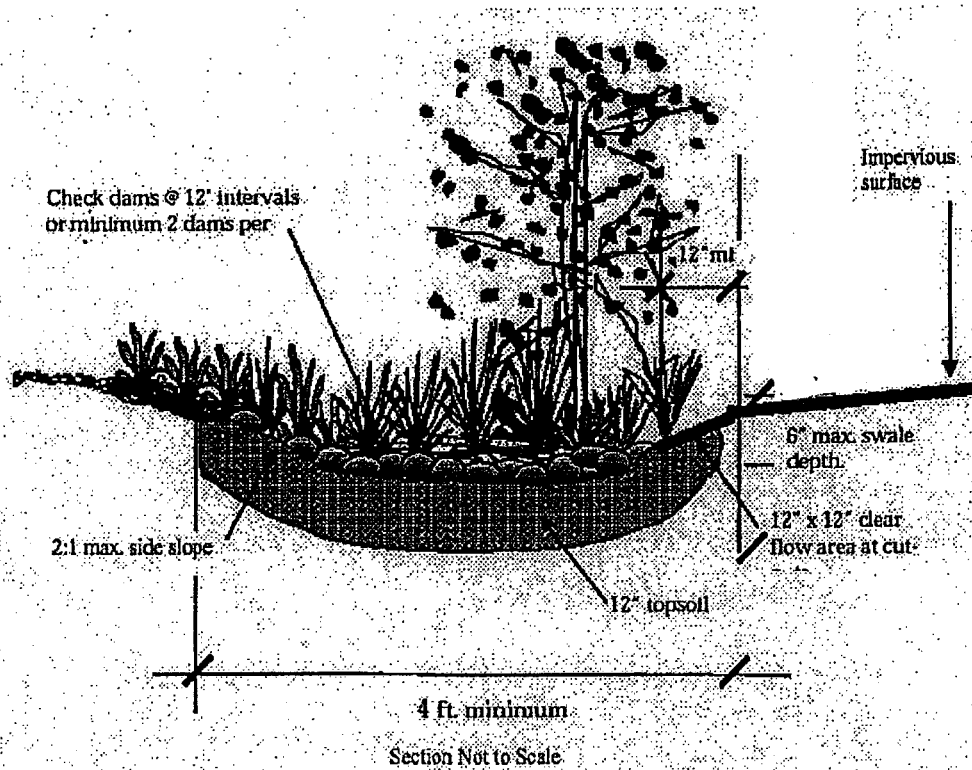
## ESTRELLA RESIDENTIAL PROJECT

### STORMWATER C3 REPORT

April 2, 2007

#### **VII. CERTIFICATION**

The selection, sizing, and preliminary design of treatment BMPs and other control measures in this plan meet the requirements of Regional Water Quality Control Board Order 01-119, as amended.



Minimum length: 20 feet.

Maximum slope: 6%.

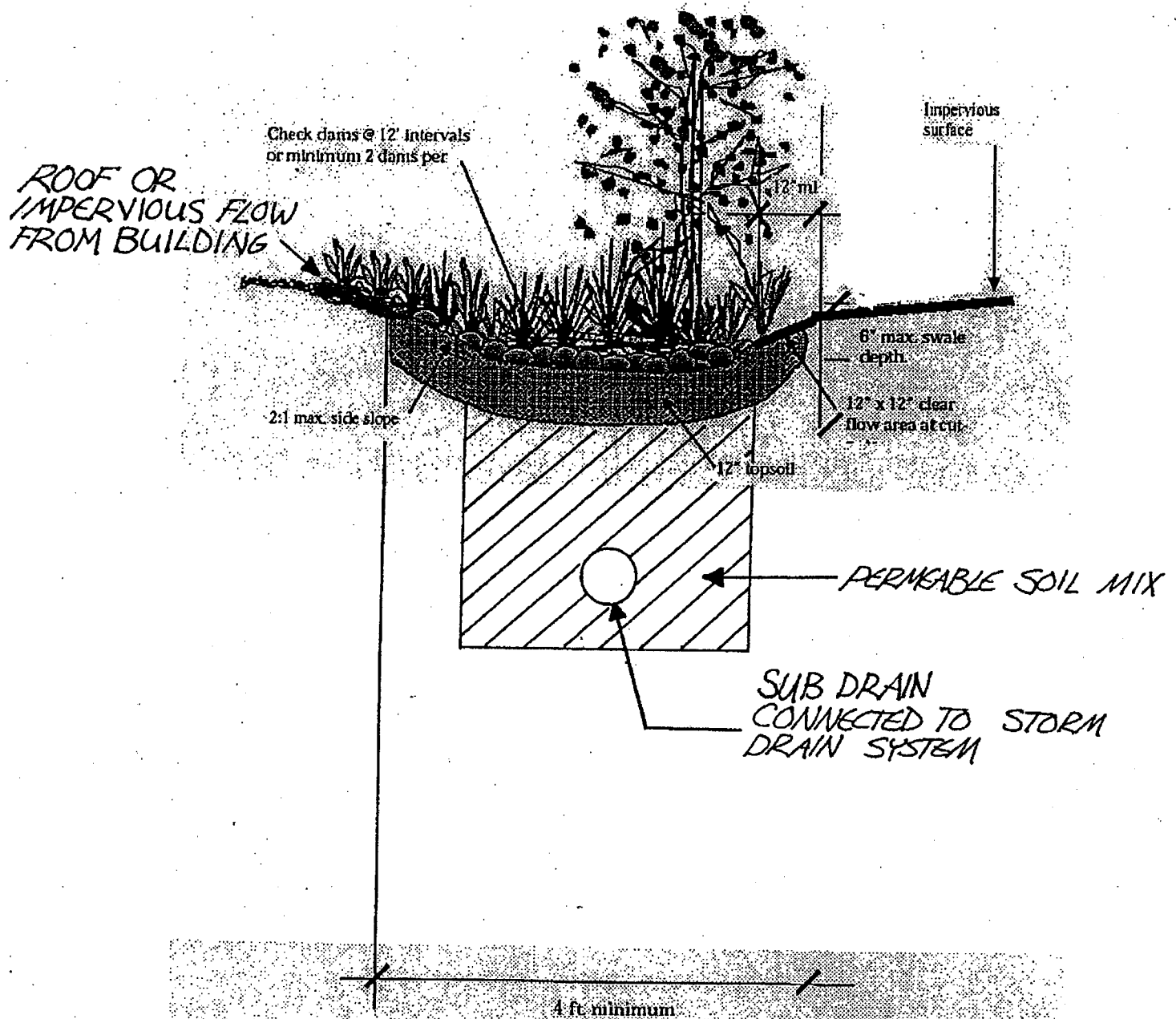
Soils in the top 12" to be equivalent to a sandy loam with a minimum infiltration rate of 5 inches/hour.

Irrigation required to maintain plant viability.

Check dams should extend the width of the swale, be 12" in length along the swale, 3"-5" high and constructed of rock, old brick, concrete, or similar.

No bypass required for larger storms.

Provide liner where required to protect groundwater. Provide underdrain system in "D" soils or where liner is required.



Minimum length: 20 feet.

Maximum slope: 6%.

Soils in the top 12" to be equivalent to a sandy loam with a minimum infiltration rate of 5 inches/hour.

Irrigation required to maintain plant viability.

Check dams should extend the width of the swale, be 12" in length along the swale, 3"-5" high and constructed of rock, old brick, concrete, or similar.

No bypass required for larger storms.

Provide liner where required to protect groundwater. Provide underdrain system in "D" soils or where liner is required.

## C.3 Data Form



## City of Milpitas

Submit with  
Stormwater  
Control Plan

**When Should This Form Be Completed?**

Complete this form if any of the following applies:

- Project was "deemed complete" between Oct. 15, 2003 – Oct. 5, 2005 and has added or replaced an impervious surface area of 1 acre (43,500 square feet) or more.
- Project was "deemed complete" after Oct. 6, 2005 and has added or replaced an impervious surface area of 10,000 square feet or more and falls within the Group 2A categories (see below).

Note: For public roadways, include new impervious surface areas, but not replaced impervious surface areas.

**What Is an Impervious Surface?**

Any surface on or above ground that prevents the infiltration or passage of water into the soil. Impervious surfaces include, but are not limited to, non-absorbent rooftops, paved or covered patios, driveways, parking lots, paved walkways, compacted soil or rock, and streets. It includes streets, roads, highways, and freeways that are under the City of Milpitas' jurisdiction and any newly constructed paved surface used primarily for the transportation of automobiles, trucks, motorcycles, and other motorized vehicles. Excluded from this category are public sidewalks, bicycle lanes, trails, bridge accessories, guardrails, and landscape features.

**How To Determine the Date "Deemed Complete"**

**Private projects** are "deemed complete" when the list of requirements needed for planning application submittals (provided by the Planning Division) is complete and ready to be processed. This list includes the Stormwater Control Plan. **Public projects** are "deemed complete" when City Council approves *design* funding.

**What are the Group 2A Categories?**

- Gas stations;
- Auto wrecking yards;
- Loading dock areas and surface parking lots containing more than 10,000 square feet or more of impervious surface area;
- Vehicle or equipment maintenance areas (including washing and repair), outdoor handling or storage of waste or hazardous materials, outdoor manufacturing area(s), outdoor food handling or processing, outdoor animal care, outdoor horticultural activities, and various other industrial and commercial uses where potential pollutant loading cannot be satisfactorily mitigated through other post-construction source control and site design practices.

**For More Information**

Contact the Planning Division at 408-586-3279.

Date: 11-27-2006 APN # 086-21-073  
 Project Name: ESTRELLA  
 Project Description: NEW SINGLE FAMILY TOWNHOME & PODIUM BLD DEVELOPMENT  
 Project Location (Address): 1647 SOUTH MAIN ST, MILPITAS, CA 95035  
 Applicant Info (Name, Address, Phone #): WARMINGTON HOMES: ATTN: DONNA VILLO  
2010 CROW CANYON PL, SUITE 450, SAN RAMON, CA 95020  
 Contractor / Designer Info (Name, Company, Address, Phone #):  
RUGGERI - JENSEN - AZAR & ASS. (CRSA) ATTN: JORGE DURAN  
8055 CAMINO ARROYO, GILROY CA 95020

1. ☐ Public ☒ Private  
 2. ☐ New ☒ Redevelopment  
 3. Project Type (select one): ☐ Commercial/Industrial ☐ Restaurant / Retail  
☐ Mixed Use ☐ Shopping Center  
☒ Residential ☐ Streets / Roads / Highways  
 4. Impervious Surface Area (SF = Square Feet):

a. Entire Site Size 490,050 SF  
 b. EXISTING Impervious Surface Area 380,280 SF  
 c. EXISTING Impervious Surface Area to be Removed 380,280 SF

d. NEW Impervious Surface Area to be Added or Replaced 315,260 SF

e. TOTAL Impervious Surface Area (b-c+d) 315,260 SF

50% Rule (only applies to existing developments NOT subject to stormwater treatment measures):

f. Percent Impervious Surface Area in Final Design (e/a x 100%) 64.33 %

For Significant Redevelopments (check appropriate box):

- ☒ If 50% or more, the entire project must be included in the treatment measure design.  
☐ If less than 50%, only that affected portion must be included in the treatment measure design.

g. Total Land Disturbance During Construction 440,232 SF  
Includes clearing, grading, and excavating.

5. Pesticide Reduction Measures Used (Check all that apply):

- ☒ None - Doesn't Apply  
☐ Education  
☐ Conditions of Approval  
☐ Physical and Mechanical Horticultural Measures  
☐ Environmental Measures  
☐ Biological Measures  
☐ Chemical Measures  
☐ Other \_\_\_\_\_

6. Stormwater Control Measures Used (Check the appropriate boxes that apply to the project):

SITE DESIGN

- ☒ Minimize land disturbance  
☒ Minimize Impervious surfaces  
☒ Minimum-impact street design  
☐ Minimum-impact driveway or parking lot design  
☒ Cluster structures/pavement  
☒ Disconnect downspouts  
☐ Alternative driveway design  
☐ Microdetention in landscape  
☒ Preserve open space: 214,590 sq. ft.  
☐ Protect riparian and wetland areas, riparian buffers (setback from top of bank: \_\_\_\_\_ ft.)  
☐ Minimize change in runoff hydrograph  
☐ Other: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

STORMWATER TREATMENT

- ☒ Bioretention  
☐ Drain Insert  
☐ Exfiltration Trench  
☐ Extended Detention Basin  
☒ Hydrodynamic Separators  
☒ Infiltration Basin  
☒ Infiltration Trench  
☐ Media Filter  
☐ Multiple Systems  
☐ Planter Boxes  
☐ Porous Pavement  
☐ Retention/Irrigation  
☐ Roof Gardens  
☐ Underground Detention Systems  
☐ Vegetated Buffer Strip  
☐ Vegetated Swale  
☐ Vortex Separator\*  
☐ Water Quality Inlet  
☐ Wet Pond  
☐ Wet Vault  
☐ Wetland  
☐ Other: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SOURCE CONTROLS

- ☐ Alternative building materials  
☐ Wash area/racks, drain to sanitary sewer  
☐ Covered dumpster area, drain to sanitary sewer  
☐ Swimming pool/fountain drain to sanitary sewer  
☒ Beneficial landscaping (minimizes irrigation, runoff, pesticides and fertilizers; promotes treatment)  
☐ Outdoor material storage protection  
☐ Covers, drains for loading docks, maintenance bays, fueling areas  
☐ Maintenance (street sweeping, catch basin cleaning)  
☐ Permeable pavement  
☒ Storm Drain Signage  
☐ Green or Blue Roofs  
☐ Other: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

FOR CITY STAFF ONLY

**PRIVATE PROJECTS**

Planning:  
Date Received: \_\_\_\_\_  
By (Name): \_\_\_\_\_  
Permit #: \_\_\_\_\_  
Project #, if applicable: \_\_\_\_\_  
Master Permit #, if applicable: \_\_\_\_\_  
  
Date Entered into Database: \_\_\_\_\_  
By (Name): \_\_\_\_\_

**PUBLIC PROJECTS**

Design & Construction Engineering / Special Projects:  
Date Received: \_\_\_\_\_  
By (Name): \_\_\_\_\_  
Permit #: \_\_\_\_\_  
Project #, if applicable: \_\_\_\_\_  
Master Permit #, if applicable: \_\_\_\_\_  
  
Date Entered into Database: \_\_\_\_\_  
By (Name): \_\_\_\_\_





## Vortechs® System

### Technical Design Manual

---

## **Vortechs System Contents**

---

<b>Design and Operation .....</b>	<b>114</b>
<b>Maintenance .....</b>	<b>117</b>
<b>Laboratory and Field Testing .....</b>	<b>120</b>

---

## Design and Operation

---

### Basic Operation

The Vortechs® System is a hydrodynamic separator designed to enhance gravitational separation of floating and settling materials from stormwater flows. Stormwater flows enter the unit tangentially to the grit chamber, which promotes a gentle swirling motion. As polluted water circles within the grit chamber, pollutants migrate toward the center of the unit where velocities are the lowest. The majority of settleable solids are left behind as stormwater exits the grit chamber through two apertures on the perimeter of the chamber. Next, buoyant debris and oil and grease are separated from water flowing under the baffle wall due to their relatively low specific gravity. As stormwater exits the System through the flow control wall and ultimately through the outlet pipe, it is relatively free of floating and settling pollutants.

Over time a conical pile tends to accumulate in the center of the unit containing sediment and associated metals, nutrients, hydrocarbons and other pollutants. Floating debris and oil and grease form a floating layer trapped in front of the baffle wall. Accumulation of these pollutants can easily be accessed through manholes over each chamber. Maintenance is typically performed through the manhole over the grit chamber.

### Design Process

Each Vortechs System is custom designed based on:

- Site size
- Site runoff coefficient
- Regional precipitation intensity distribution
- Anticipated pollutant characteristics

These factors are incorporated into the Rational Rainfall Method™ to estimate net annual pollutant removal efficiency.

#### *The Rational Rainfall Method™*

Differences in local climate, topography and scale make every site hydraulically unique. It is important to take these factors into consideration when estimating the long-term performance of any stormwater treatment system. The Rational Rainfall Method™ combines site-specific information with laboratory generated performance data, and local historical precipitation records to estimate efficiencies as accurately as possible.

Short duration rain gauge records from across the United States and Canada were analyzed to determine the percent of the total annual rainfall that fell at a range of intensities. US stations' depths were totaled every 15 minutes or hourly and recorded in 0.01-inch increments. Depths were recorded hourly with 1 mm resolution at Canadian stations. One trend was consistent at all sites; the vast majority of precipitation fell at low intensities and high intensity storms contributed relatively little to the total annual depth.

These intensities, along with the total drainage area and runoff coefficient for each specific site, are translated into flow rates using the Rational Rainfall Method. Since most sites are relatively small and highly impervious, the Rational Rainfall Method is appropriate. Based on the flow rates calculated for each intensity, an operating rate within a proposed Vortechs System is determined. Finally, a removal efficiency is selected for each operating rate based on anticipated pollutant characteristics and on full scale laboratory tests. The relative removal efficiency at each operating rate is added to produce a net annual pollutant removal efficiency estimate.

CONTECH Stormwater Solutions typically selects the system that will provide an 80% annual TSS load reduction based on laboratory generated performance curves for 50-micron sediment particles,

however the Rational Rainfall Method can accommodate other removal efficiency or particle size targets. It can also be used to estimate annual hydrocarbon load reductions.

Once a System size is established, the internal elements of the System will be designed based on information provided by the site engineer. Flow control sizes and shapes, sump depth, spill storage capacity, sediment storage volume and inlet and outlet orientation are determined for each System. In addition, bypass weir calculations are made for off-line Systems.

## Flow Control Calculations

### The Orifice

The lower flow control or "orifice" is typically sized to submerge the inlet pipe when the Vortechs System is operating at 20% of its' treatment capacity. The orifice is typically a Cippoletti shaped aperture defined by its flat crest and sides which incline outwardly at a slope of 1 horizontal to 4 vertical.

$$\Rightarrow \text{Flow through orifice} = Q_{\text{orf}} = C_d \cdot A \cdot (2gh)^{0.5}$$

Where  $C_d$  = Orifice contraction coefficient = 0.56 (based on CONTECH Stormwater Solutions laboratory testing)

$A$  = Orifice flow area,  $\text{ft}^2$  (calculated by CONTECH Stormwater Solutions technical staff)

$h$  = Design head, ft (equal to the inlet pipe diameter)

The minimum orifice crest length is 3-inches and the minimum orifice height is 4-inches. If flow must be restricted beyond what can be provided by this size aperture, a Fluidic-Amp™ hydro-brake flow control will be used. The hydro-brake allows the minimum flow constriction to remain at 3-inches or greater while further reducing flow due to its unique throttling action.

### The Weir

The high flow control or "weir" is sized to pass the peak System capacity minus the peak orifice flow when the water surface elevation is at the top of the weir. This flow control is also a Cippoletti type weir.

The weir flow control is sized by solving for the crest length and head in the following equation:

$$\Rightarrow \text{Flow through weir} = Q_{\text{weir}} = C_d \cdot L \cdot (h)^{1.5}$$

Where  $C_d$  = Cippoletti Weir coefficient = 3.37 (based on CONTECH Stormwater Solutions laboratory testing)

$h$  = Available head, ft (height of weir)

$L$  = Design weir crest length, ft (calculated by CONTECH Stormwater Solutions technical staff)

## Bypass Calculations

In some cases, pollutant removal goals can be met without treating peak flow rates and it is most feasible to use a smaller Vortechs System configured with an external bypass. In such cases, a bypass design is recommended by CONTECH Stormwater Solutions for each off-line System. To calculate the bypass capacity, first subtract the System's treatment capacity from the peak conveyance capacity of the collection system (minimum of 10 year recurrence interval). The result is the flow rate that must be bypassed to avoid surcharging the Vortechs System. Then use the following arrangement of the Francis formula to calculate the depth of flow over the bypass weir.

$$\Rightarrow \text{Flow over bypass weir} = H = (Q_{\text{bypass}} / (C_d \cdot L))^{2/3}$$

Where

$C_d$  = Discharge Coefficient = 3.3 for rectangular weir

$H$  = Depth of flow over bypass weir crest, ft

$L$  = Length of bypass weir crest, ft

The bypass weir crest elevation is then calculated to be the elevation at the top of the Cippoletti weir minus the depth of flow.

### Hydraulic Capacity

In the event that the peak design flow from the site is exceeded, it is important that the Vortechs System is not a constriction to runoff leaving the site. Therefore, each System is designed with enough hydraulic capacity to pass the 100-year flow rate. It is important to note that at operating rates above 100 gpm/ft<sup>2</sup> of the grit chamber area (peak *treatment* capacity), captured pollutants may be lost.

When the System is operating at peak *hydraulic* capacity, water will be flowing through the gap over the top of the flow control wall as well as the orifice and the weir.

---

## Maintenance

---

The Vortechs System should be inspected at regular intervals and maintained when necessary to ensure optimum performance. The rate at which the system collects pollutants will depend more heavily on site activities than the size of the unit, e.g., unstable soils or heavy winter sanding will cause the grit chamber to fill more quickly but regular sweeping will slow accumulation.

### Inspection

Inspection is the key to effective maintenance and is easily performed. CONTECH Stormwater Solutions recommends ongoing quarterly inspections of the accumulated sediment. Pollutant deposition and transport may vary from year to year and quarterly inspections will help insure that systems are cleaned out at the appropriate time. Inspections should be performed more often in the winter months in climates where sanding operations may lead to rapid accumulations, or in equipment washdown areas. It is very useful to keep a record of each inspection. A simple form for doing so is provided.

The Vortechs System should be cleaned when inspection reveals that the sediment depth has accumulated to within six inches of the dry-weather water surface elevation. This determination can be made by taking 2 measurements with a stadia rod or similar measuring device; one measurement from the manhole opening to the top of the sediment pile and the other from the manhole opening to the water surface. The System should be cleaned out if the difference between the two measurements is six inches or less. Note: to avoid underestimating the volume of sediment in the chamber, the measuring device must be lowered to the top of the sediment pile carefully. Finer, silty particles at the top of the pile typically offer less resistance to the end of the rod than larger particles toward the bottom of the pile.

### Cleaning

Maintaining the Vortechs system is easiest when there is no flow entering the system. For this reason, it is a good idea to schedule the cleanout during dry weather. Cleanout of the Vortechs system with a vacuum truck is generally the most effective and convenient method of excavating pollutants from the system. If such a truck is not available, a "clamshell" grab may be used, but it is difficult to remove all accumulated pollutants with such devices.

In installations where the risk of large petroleum spills is small, liquid contaminants may not accumulate as quickly as sediment. However, an oil or gasoline spill should be cleaned out immediately. Motor oil and other hydrocarbons that accumulate on a more routine basis should be removed when an appreciable layer has been captured. To remove these pollutants, it may be preferable to use adsorbent pads since they are usually cheaper to dispose of than the oil water emulsion that may be created by vacuuming the oily layer. Trash can be netted out if you wish to separate it from the other pollutants.

Accumulated sediment is typically evacuated through the manhole over the grit chamber. Simply remove the cover and insert the vacuum hose into the grit chamber. As water is evacuated, the water level outside of the grit chamber will drop to the same level as the crest of the lower aperture of the grit chamber. It will not drop below this level due to the fact that the bottom and sides of the grit chamber are sealed to the tank floor and walls. This "Water Lock" feature prevents water from migrating into the grit chamber, exposing the bottom of the baffle wall. Floating pollutants will decant into the grit chamber as the water level there is drawn down. This allows most floating material to be withdrawn from the same access point above the grit chamber.

If maintenance is not performed as recommended, sediment may accumulate outside the grit chamber. If this is the case, it may be necessary to pump out all chambers. It is a good idea to check for accumulation in all chambers during each maintenance event to prevent sediment build up there.

Manhole covers should be securely seated following cleaning activities, to ensure that surface runoff does not leak into the unit from above.

# Vortechs System Inspection & Maintenance Log – Sample

Model 5000			Location: Little Silver, NJ		
Date	Water Depth to Sediment	Floating Layer Thickness	Maintenance Performed	Maintenance Personnel	Comments
12/1/01	36"	0"	NA	E. Johnson	Installed
3/1/02	36"	Shoal	None	E. Johnson	Swampy
6/1/02	24"	Heavy Shoal	None		
9/1/02	24"		Sanitary parts deployed to remove captured oil	S. Pary	Oil spill
12/1/02	32"	Shoal	None	S. Pary	
4/1/03	36"	0.5" oil	Oil removed	S. Pary	Heavy rain
7/15/03	38"	0"	Grit Chamber activated	ACE Environmental Services	Grants completed
<div>SAMPLE SHEET</div>					

1. The water depth to sediment is determined by taking two measurements with a stadia rod: one measurement from the manhole opening to the top of the sediment pile and the other from the manhole opening to the water surface. When the difference between the two measurements is six inches or less, the system should be cleaned out.
2. For optimum performance, the system should be cleaned out when the floating hydrocarbon layer accumulates to an appreciable thickness. In the event of a spill, the system should be cleaned immediately.

[illegible]

1. The water depth to sediment is determined by taking two measurements with a stadia rod: one measurement from the manhole opening to the top of the sediment pile and the other from the manhole opening to the water surface. When the difference between the two measurements is six inches or less, the system should be cleaned out.
2. For optimum performance, the system should be cleaned out when the floating hydrocarbon layer accumulates to an appreciable thickness. In the event of a spill, the system should be cleaned immediately.



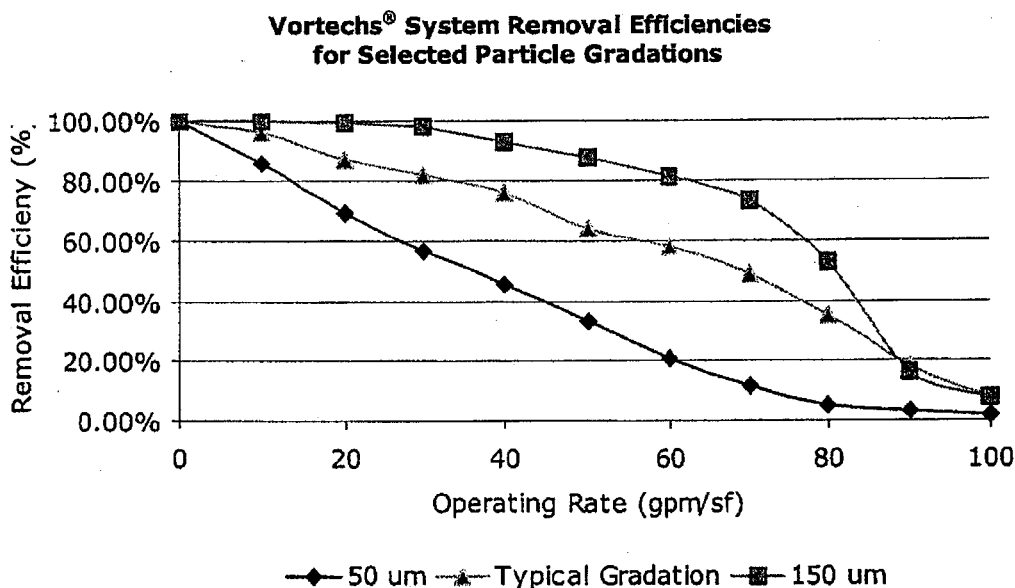
## Laboratory and Field Testing

### Introduction

CONTECH Stormwater Solutions is an established leader in the stormwater treatment industry, marketing the Vortechs Stormwater Treatment System as a technology capable of removing a high percentage of floating and settling pollutants from stormwater flows. Extensive testing in both the laboratory and in the field has produced a comprehensive set of data describing the relationship between flow rate, particle size, and removal efficiency.

Sections 1 and 2 contain the results of laboratory and field-testing. Section 1 shows the results of full-scale testing with a Vortechs Model 2000 at a CONTECH Stormwater Solutions laboratory in Portland, Maine. Section 2 includes long term monitoring results from several Vortechs Systems installed on typical projects.

Figure 1. Laboratory Testing - Vortechs Stormwater Treatment System Performance



These performance curves are based on laboratory tests using a full scale Vortechs Model 2000. The testing protocol used is described on the following pages. The 150-micron curve demonstrates the results of tests using particles that passed through a 100-mesh sieve and were retained on a 150-mesh sieve. The 50-micron curve is based on tests of particles passing through a 200-mesh sieve and retained on a 400-mesh sieve. A slurry representing an average stormwater sediment gradation, with the particle size gradation shown in Table 1 on page 121, was also tested in our laboratory.

As the graph clearly shows, Vortechs Systems maintain positive total suspended solids (TSS) removal efficiencies over the full range of operating rates, allowing the system to effectively treat all runoff from large infrequent design storms as well as runoff from the more frequent low intensity storms. Precast Vortechs Systems are designed to treat peak flows from 1.6 cfs up to 25 cfs without bypassing. Peak flows that exceed rated treatment capacities can be conveyed around the system with an external bypass. Internal bypasses can be configured to direct low flows from the last chamber of the Vortechs system to polishing treatment when more stringent water quality standards are imposed. In all configurations, high removal efficiencies are achieved during the lower intensity storms, which constitute the majority of annual rainfall volume.

## Laboratory Quality Control Brief

The following protocol summarizes standard operating procedures for Total Suspended Solids (TSS) testing in the CONTECH Stormwater Solutions Laboratory. These guidelines were followed in the creation of the preceding performance curves.

### ***Sediment Source***

Sediment samples are sorted according to ASTM Special Technical Publication 477 B, which establishes sieve analysis procedures. U.S. Standard Sieves in a Gilson SS-15 sieve shaker are used to separate particles to the various fractions required for our tests. To ensure uniformity of those fractions, an unsorted sample is sieved until less than 1% of that sample passes through the sieve in one minute. All sediment recovered after a test is dried and sent back through a sieve before reuse. Unless otherwise specified, mineral sediments with a density of  $2.65 \text{ g/cm}^3$  are used.

The following table describes the particle size distribution of samples tested by CONTECH Stormwater Solutions to represent TSS Loading in typical urban runoff.

Table 1.	
Particle Size Distribution	Percentage of Sample Make-up
< 63 mm	42%
63 – 75 mm	4%
75 – 100 mm	9%
100 – 150 mm	7%
150 – 250 mm	11%
> 250 mm	27%

### ***Flow Calibration and Regulation***

Flow calibration is accomplished by calculating the head at the baffle wall required to produce a given flow rate through the orifice and the weir in the flow control wall. Flow is regulated by a 12-inch butterfly valve located upstream of the Vortechs system. In order to simulate field conditions, flow rates are changed gradually to avoid flow surges through the system. The test flow rate is set by observing the head in the Vortechs system and adjusting the regulating valve accordingly. Before any samples are collected, the valve must remain fixed for a period equal to half of the detention time so that flow equalizes throughout the system. Each test group is planned so that flow rates increase incrementally in consecutive tests.

### ***Sediment Metering***

All sediment is injected into the inlet pipe via a ¼-inch flexible hose using a Watson Marlow 5058 peristaltic metering pump. For TSS tests, a known gradation of sediment and water are combined in approximately a 1/2 pound/gallon ratio in a holding tank and homogenized by a mixing propeller powered by a 1/3 horsepower motor. The mixer is activated at least 5 minutes before testing commences and runs continuously throughout the test. The metering pump is activated for a period of time equal to at least half of the detention time of the Vortechs system at the test flow rate, before the first influent sample is taken. The pump must run continuously until the last effluent sample is taken.

### ***Sample Collection***

All influent samples are taken from a 6-inch gate valve located upstream of the Vortechs system. A collection bin housing a 500 mL sample container is positioned beneath the valve. Five seconds before each sample is taken the valve is quickly opened and closed to eliminate any interference from particles that have settled in the low velocity region of the gate. This eliminates artificially high influent readings. The time that the influent sample was taken is recorded and the corresponding effluent

## Laboratory and Field Testing

sample is collected after a period of time equal to the detention time. Effluent grab samples are collected at the discharge pipe, by sweeping the mouth of a 500 mL bottle through the exiting flow stream. Samples are annotated and refrigerated until they can be analyzed.

### Sample Analysis

TSS samples are analyzed in the CONTECH Stormwater Solutions laboratory, following EPA method 160.2, a method for the measurement of total non-filterable solids. Volume measurements are accurate to 0.6 mL using a 500 mL graduated cylinder and an Acculab V-1 analytical balance with a readability of 0.001 g is used to measure mass.

## Field Testing - Vortechs System Field Monitoring Summary

CONTECH Stormwater Solutions has become a leader in the stormwater industry in large part because of the company's unwavering long-term commitment to research and development. In addition to performing their own field tests, CONTECH Stormwater Solutions has diligently pursued opportunities to work with third party organizations to test their products. In fact, the Vortechs system has been subjected to the most comprehensive third party testing in the industry. These independent studies have allowed CONTECH Stormwater Solutions to corroborate their lab and field data to ensure that actual performance of the Vortechs system matches their claims.

Following are brief summaries of the field tests completed to date. Please contact CONTECH Stormwater Solutions for the full reports. In addition, all reports are available for download on CONTECH Stormwater Solutions web site at [www.contechstormwater.com](http://www.contechstormwater.com).

### DeLorme Mapping Company - Yarmouth, ME CONTECH Stormwater Solutions

Prior to this premier field test of the Vortechs system, CONTECH Stormwater Solutions developed an extensive body of laboratory data to document total suspended solids (TSS) removal efficiency. CONTECH Stormwater Solutions performed this field study in order to compare the performance predicted using laboratory data to the performance of a correctly sized system in the field.

The study site was the headquarters of DeLorme Mapping in Yarmouth, Maine. The building, driveway, parking lot and ancillary facilities were constructed in 1996. A Vortechs Model 11000 was installed to treat runoff from the 300-space, 4-acre parking lot.

Testing Period	May 1999 to Dec. 1999
# of Storms Sampled	20
Mean Influent Concentration	328 mg/L
Mean Effluent Concentration	60 mg/L
Removal Efficiency	82%

The main purpose of the DeLorme study was to verify that the sizing methodology developed from our full-scale laboratory testing was valid and an accurate means of predicting field performance. The results of the study confirmed our sizing methodology.

### Village Marine Drainage - Lake George, NY New York State Department of Environmental Conservation, Division of Water

The New York State DEC used funds obtained in a Section 319 grant to initiate a study of the effectiveness of the Vortechs system to remove sediment and other pollutants transported by stormwater to Lake George, Lake George Village, New York. "Since the 1970s, when there was a rapid increase in the rate and concentration of development along the southwestern shores of Lake George, we have been concerned about the impact of stormwater discharges into the lake," said Tracy West, co-author of the study.

Testing Period	Feb. 2000 to Dec. 2000
----------------	------------------------

## Laboratory and Field Testing

<b># of Storms Sampled</b>	13
<b>Mean Influent Concentration</b>	801 mg/L
<b>Mean Effluent Concentration</b>	105 mg/L
<b>Removal Efficiency</b>	88%

The study concluded that the Village and Town of Lake George should consider installing additional Vortechs Systems in areas where sedimentation and erosion have been identified as non-point source pollution problems.

### **Harding Township Rest Area - Harding Township, NJ** **RTP Environmental Associates**

This third party evaluation was performed under a U.S. Environmental Protection Agency grant, administered by the New Jersey Department of Environmental Protection. A. Roger Greenway, principal of RTP Environmental Associates, Inc., conducted the study in conjunction with Thonet Associates, which assisted with data analysis and helped develop best management practices (BMP) recommendations.

The Vortechs Model 4000 was sized to handle a 100-year storm from the three-acre paved parking area at the Harding Rest Stop, located off the northbound lane of I-287 in Harding Township, New Jersey.

<b>Testing Period</b>	May 1999 to Nov. 2000
<b># of Storms Sampled</b>	5
<b>Mean Influent Concentration (TSS)</b>	493 mg/L
<b>Mean Effluent Concentration (TSS)</b>	35 mg/L
<b>Removal Efficiency (TSS)</b>	93%
<b>Mean Influent Concentration (TPH)</b>	16 mg/L
<b>Mean Effluent Concentration (TPH)</b>	5 mg/L
<b>Removal Efficiency (TPH)</b>	67%

The study concluded that truck rest stops and similar parking areas would benefit from installing stormwater treatment systems to mitigate the water quality impacts associated with stormwater runoff from these sites.

### **Timothy Edwards Middle School - South Windsor, CT** **UCONN Department of Civil & Environmental Engineering**

Susan Mary Board published this study of the Vortechs system as a thesis as part of the requirements for a Master of Science degree from the University of Connecticut. Her objective was to determine how well the Vortechs system retained pollutants from parking lot runoff, including total suspended solids (TSS), nutrients, metals, and petroleum hydrocarbons.

A Vortechs Model 5000 was installed in 1998 to treat runoff from the 82-space parking lot of Timothy Edwards Middle School. The entire watershed was approximately 2 acres, and was 80% impervious.

<b>Testing Period</b>	July 2000 to April 2001
<b># of Storms Sampled</b>	Weekly composite samples taken
<b>Mean Influent Concentration</b>	324 mg/L
<b>Mean Effluent Concentration</b>	73 mg/L
<b>Removal Efficiency</b>	77%

Additionally, the Vortechs system was particularly effective in removing zinc (85%), lead (46%), copper (56%), phosphorus (67%) and nitrate (54%).

The study concluded that the Vortechs Stormwater Treatment system significantly reduced effluent concentrations of many pollutants in stormwater runoff.

## SECTION 02721

### STORMWATER TREATMENT SYSTEM

#### PART 1.00 GENERAL

##### 1.1 DESCRIPTION

###### A. Work included:

The Contractor, and/or a manufacturer selected by the Contractor and approved by the Engineer, shall furnish all labor, materials, equipment and incidentals required and install all precast concrete stormwater treatment systems and appurtenances in accordance with the Drawings and these specifications.

##### 1.2 QUALITY CONTROL INSPECTION

A. The quality of materials, the process of manufacture, and the finished sections shall be subject to inspection by the Engineer. Such inspection may be made at the place of manufacture, or on the work site after delivery, or at both places, and the sections shall be subject to rejection at any time if material conditions fail to meet any of the specification requirements, even though sample sections may have been accepted as satisfactory at the place of manufacture. Sections rejected after delivery to the site shall be marked for identification and shall be removed from the site at once. All sections which have been damaged beyond repair during delivery will be rejected and, if already installed, shall be repaired to the Engineer's acceptance level, if permitted, or removed and replaced, entirely at the Contractor's expense.

B. All sections shall be inspected for general appearance, dimensions, soundness, etc. The surface shall be dense, close textured and free of blisters, cracks, roughness and exposure of reinforcement.

C. Imperfections may be repaired, subject to the acceptance of the Engineer, after demonstration by the manufacturer that strong and permanent repairs result. Repairs shall be carefully inspected before final acceptance. Cement mortar used for repairs shall have a minimum compressive strength of 4,000 psi (28 MPa) at the end of 7 days and 5,000 psi (34 MPa) at the end of 28 days when tested in 3 inch (76 mm) diameter by 6 inch (152 mm) long cylinders stored in the standard manner. Epoxy mortar may be utilized for repairs.

##### 1.3 SUBMITTALS

###### Shop Drawings

The Contractor shall be provided with dimensional drawings and, when specified, utilize these drawings as the basis for preparation of shop drawings showing details for construction, reinforcing, joints and any cast-in-place appurtenances. Shop drawings shall be annotated to indicate all materials to be used and all applicable standards for materials, required tests of materials and design assumptions for structural analysis. Shop drawings shall be prepared at a scale of not less than 3/16-inches per foot (1:75). Six (6) hard copies of said shop drawings shall be submitted to the Engineer for review and approval.

#### PART 2.00 PRODUCTS

##### 2.1 MATERIALS AND DESIGN

- A. Concrete for precast stormwater treatment systems shall conform to ASTM C 857 and C 858 and meet the following additional requirements:
  1. The wall thickness shall not be less than 6 inches (152 mm) or as shown on the dimensional drawings. In all cases the wall thickness shall be no less than the minimum thickness necessary to sustain HS20-44 (MS18) loading requirements as determined by a Licensed Professional Engineer.
  2. Sections shall have tongue and groove or ship-lap joints with a butyl mastic sealant conforming to ASTM C 990.
  3. Cement shall be Type II Portland cement conforming to ASTM C 150.
  4. All sections shall be cured by an approved method. Sections shall not be shipped until the concrete has attained a compressive strength of 4,000 psi (28 MPa) or until 5 days after fabrication and/or repair, whichever is the longer.
  5. Pipe openings shall be sized to accept pipes of the specified size(s) and material(s), and shall be sealed by the Contractor with a hydraulic cement conforming to ASTM C 595M.
- B. Internal aluminum plate components shall be aluminum alloy 5052-H32 in accordance with ASTM B 209.
- C. Sealant to be utilized at the base of the swirl chamber shall be 60 durometer extruded nitrile butadiene rubber (Buna N) and shall be provided to the concrete precastor for installation.
- D. Brick or masonry used to build the manhole frame to grade shall conform to ASTM C 32 or ASTM C 139 and shall be installed in conformance with all local requirements.
- E. Casting for manhole frames and covers shall be in accordance with ASTM A48, CL30B and AASHTO M105. The manhole frame and cover shall be equivalent to Campbell Foundry Pattern #1009A or #1012D custom cast with the CONTECH Stormwater Solutions logo and (optionally) tagline.
- F. A bitumen sealant in conformance with ASTM C 990 shall be utilized in the sealing of the joint between the swirl chamber and the vault at the long wall tangent points. The butyl material shall be 3/4-inch thick by 3/4-inch wide.

## 2.2 PERFORMANCE

Each stormwater treatment system shall adhere to the following performance specifications at the design treatment capacities, as listed below:

Table 2.

Vortexch Model	Design Treatment Capacity (cfs)	Stormwater Storage Volume (cu ft)
1000	0 - 1.6 (0 - 45)	0.7 (0.54)
2000	1.6 - 2.8 (45-80)	1.2 (0.91)
3000	2.8 - 4.5 (80-125)	1.8 (1.38)
4000	4.5 - 6.0 (125-175)	2.4 (1.84)
5000	6.0 - 8.5 (175-240)	3.2 (2.45)
7000	8.5 - 11.0 (240-315)	4.0 (3.06)
9000	11.0 - 14.0 (315-400)	4.8 (3.67)
11000	14.0 - 17.5 (400-495)	5.6 (4.28)
16000	17.5 - 25.0 (495-710)	7.1 (5.43)

Each stormwater treatment system shall include a circular aluminum "swirl

chamber" (or "grit chamber") with a tangential inlet to induce a swirling flow pattern that will accumulate and store settleable solids in a manner and a location that will prevent re-suspension of previously captured particulates.

Each stormwater treatment system shall be of a hydraulic design that includes flow controls designed and certified by a professional engineer using accepted principles of fluid mechanics that raise the water surface inside the tank to a pre-determined level in order to prevent the re-entrainment of trapped floating contaminants.

Each stormwater treatment system shall be capable of removing **80% of the net annual Total Suspended Solids (TSS)** load based on a 50-micron particle size. Annual TSS removal efficiency models shall be based on documented removal efficiency performance from full scale laboratory tests. Annual TSS removal efficiency models shall only be considered valid if they are corroborated by independent third party field testing. Said field testing shall include influent and effluent composite samples from a minimum of ten storms at one location. Individual stormwater treatment systems shall have the Design Treatment Capacity listed in Table 2 on page 125, and shall not re-suspend trapped sediments or re-entrain floating contaminants at flow rates up to and including the specified Design Treatment Capacity.

Individual stormwater treatment systems shall have usable sediment storage capacity of not less than the corresponding volume listed in Table 2. The systems shall be designed such that the pump-out volume is less than  $\frac{1}{2}$  of the total system volume. The systems shall be designed to not allow surcharge of the upstream piping network during dry weather conditions.

A water-lock feature shall be incorporated into the design of the stormwater treatment system to prevent the introduction of trapped oil and floatable contaminants to the downstream piping during routine maintenance and to ensure that no oil escapes the system during the ensuing rain event. Direct access shall be provided to the sediment and floatable contaminant storage chambers to facilitate maintenance. There shall be no appurtenances or restrictions within these chambers.

Stormwater treatment systems shall be completely housed within one rectangular structure.

## 2.3 MANUFACTURER

Each stormwater treatment system shall be of a type that has been installed and used successfully for a minimum of 5 years. The manufacturer of said system shall have been regularly engaged in the engineering design and production of systems for the physical treatment of stormwater runoff during the aforementioned period.

Each stormwater treatment system shall be a Vortechs system as manufactured by CONTECH Stormwater Solutions, a division of CONTECH Construction Products, Inc. and as protected under U.S. Patent #5,759,415.

## PART 3.00 EXECUTION

### 3.1 INSTALLATION

- A. Each Stormwater Treatment system shall be constructed according to the sizes shown on the Drawings and as specified herein. Install at elevations and locations shown on the Drawings or as otherwise directed by the Engineer.
- B. Place the precast base unit on a granular subbase of minimum thickness of six inches (152 mm) after compaction or of greater thickness and compaction if specified elsewhere. The granular subbase shall be checked for level prior

to setting and the precast base section of the trap shall be checked for level at all four corners after it is set. If the slope from any corner to any other corner exceeds 0.5% the base section shall be removed and the granular subbase material re-leveled.

- C. Prior to setting subsequent sections place bitumen sealant in conformance with ASTM C 990 along the construction joint in the section that is already in place.
- D. After setting the base and wall or riser sections, prepare to install the swirl chamber. Place the 3/4-inch (19 mm) thick by 3/4-inch (19 mm) wide butyl mastic seal vertically on the outside of the swirl chamber starting one inch above the bottom of the swirl chamber and continuing to a height equal to the elevation of the bottom of the upper aperture of the swirl chamber. The butyl mastic seal should abut the downstream side of the pre-drilled mounting holes that attach the swirl chamber to the long walls of the concrete vault. Next, install the extruded Buna N seal on the bottom edge of the 180 degree downstream section of the swirl chamber by first applying a bead of Sikaflex-1a polyurethane elastomeric sealant into the extruded slot then slide the seal onto the swirl chamber. The extruded seal should extend 3-inches (76 mm) upstream of the mounting holes, toward the inlet end of the vault. Set the swirl chamber into position and keep the seal approximately 1/2-inch (13 mm) above the floor of the concrete vault. Apply a continuous bead of Sikaflex-1a sealant under the cupped bottom of the seal. Set the circular swirl chamber on the floor of the vault and anchor it by bolting the swirl chamber to the side walls of the concrete vault at the three (3) tangent points and at the inlet tab using HILTI brand stainless steel drop-in wedge anchors or equivalent 3/8-inch (10 mm) diameter by 2-3/4 inch (70 mm) minimum length at heights of approximately three inches (3") (76 mm) off the floor and at fifteen inch (15") (381 mm) intervals to approximately the same height of the butyl mastic sealant (at locations of pre-drilled holes in aluminum components). Apply a continuous bead of Sikaflex-1a sealant to the intersection of the inside bottom edge of the extruded seal and the vault floor.
- E. If the oil baffle wall (Baffle A) and flow control wall (Baffle B) are not integrally cast-in to riser/wall sections then the Baffle wall panels shall be placed in the formed keyways or between bolted-in-place angle flanges as provided by the manufacturer. Apply non-shrink grout or Sikaflex-1a sealant to each end of Baffle A and Baffle B at the upstream intersection with the side walls of the concrete vault.
- F. Prior to setting the precast roof section, bitumen sealant equal to ASTM C 990 shall be placed along the top of the oil baffle wall (Baffle A), using more than one layer of mastic if necessary, to a thickness at least 1-inch (25 mm) greater than the nominal gap between the top of the baffle and the roof section. The nominal gap shall be determined either by field measurement or the shop drawings. Do not seal the top of Baffle B unless specified on the shop drawings to do so. After placement of the roof section has compressed the butyl mastic sealant in the gap over Baffle A, finish sealing the gap with an approved non-shrink grout on both sides of the gap using the butyl mastic as a backing material to which to apply the grout. If roof section is "clamshell" or "bathtub" halves, then finish sealing the ends of the Baffle walls by applying non-shrink grout or Sikaflex-1a sealant to each end of Baffle A at the upstream intersection with the side walls of the concrete vault and to each end of Baffle B at the downstream intersection with the side walls of the concrete vault.
- G. After setting the precast roof section of the stormwater treatment system, set precast concrete manhole riser sections, to the height required to bring the cast iron manhole covers to grade, so that the sections are vertical and in true



## Laboratory and Field Testing

alignment with a ¼-inch (6 mm) maximum tolerance allowed. Backfill in a careful manner, bringing the fill up in 6-inch (152 mm) lifts on all sides. If leaks appear, clean the inside joints and caulk with lead wool to the satisfaction of the Engineer. Precast sections shall be set in a manner that will result in a watertight joint. In all instances, installation of Stormwater Treatment Systems shall conform to ASTM specification C 891 "Standard Practice for Installation of Underground Precast Utility Structures".

- H. Holes made in the concrete sections for handling or other purposes shall be plugged with a non-shrink grout or by using grout in combination with concrete plugs.
- I. Where holes must be cut in the precast sections to accommodate pipes, do all cutting before setting the sections in place to prevent any subsequent jarring which may loosen the mortar joints. The Contractor shall make all pipe connections.

ATTACHMENT 5  
DETENTION RETENTION AND BMP SIZING WORKSHEET

Project Site Size (sf)	490,050	
Existing impervious surface area (sf)	380,278	New Impervious surface area to be added (sf)
New Impervious surface area to be replaced (sf)	0	New total impervious surface area (sf)
		315,260
		315,260

Table 1. Pervious Areas

AREA ID	SURFACE	SELF-RETAINING	NON-SELF-RETAINING	RUNOFF FACTOR "C"	SIZE*C
Area 1	Vegetated Bio-Swale	83,644			
Area 3	Vegetated treatment		84,947	0.1	8,495
Area 5	Natural ground		46,000	0.1	4,600
Totals		83,644	130,947		13,095

Runoff factors for non self retaining pervious areas "C"	
Surface	
Turf	0.1
Landscape	0.1
Crushed aggregate	0.1
Pervious Concrete	0.6
Pervious Asphalt	0.55

Table 2. Impervious Areas

AREA ID	SURFACE	SIZE (sf)	BM TO BE USED	SIZING FACTOR	MINIMUM SURFACE AREA	SURFACE AREA AS DESIGNED
Area 2	Roof Areas to Bio-Swale	81,711	Vegetated Bio-Swale	0.034	2,778	8,364
Area 4	Roof and Asphalt	189,930	Mechanical filter			
Total		271,641	treatment	0.034	6,458	n/a

Sizing Factors	
BMP	Factor
Landscape swale	0.034
Vegetative filter	0.034
Storm water planter	0.034
Sand filter	0.034

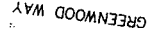
Total area served by intergraded/distributed BMPs	81,711
Remaining DCIA not served by intergraded/distributed BMPs	189,930
Total remaining connected area in this catchment	0

Structural BMP water quality volume (California BMP Method)	
Percent remaining directly connected impervious area	39%
Enter unit basin storage volume (from nonograph)	0.033
Water quality volume (cubic feet)	16,172

Area 4 / Total

Structural BMP Design Flow Rate	
Runoff factor for non-self-retaining area	0.9
Design rainfall intensity (in/hr)	0.2
Design Flow Peak Rate (cubic ft/hr)	2.03

<u>LEGEND</u>			
<u>DESCRIPTION</u>	<u>SQUARE FOOTAGE</u>	<u>ACREAGE</u>	<u>STORM WATER (CFS)</u>
VEGETATED BIO-SWALE AREA	83,644	1.92	0.9
ROOF AREAS DRAINING TO LANDSCAPE	81,711	1.88	3.8
VEGETATED TREATMENT AREA	84,947	1.95	0.9
MECHANICAL FILTER TREATMENT AREA	189,920	4.36	6.9
NATURAL GROUND/LANDSCAPE AREAS	46,000	1.06	0.5
TOTALS	486,232	11.2	15.0
BUILDING / LOT NUMBERS			

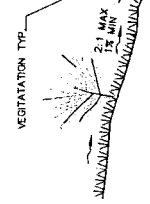
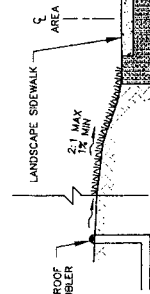
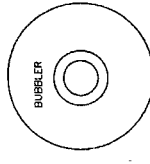


SOUTH MAIN STREET

CONTECH VORTEX STORMWATER  
TREATMENT UNIT MODEL 4000.  
SEE DETAIL BELOW.

## TOWNHOME DRAINAGE SUMMARY

## PODIUM BUILDING DRAINAGE SUMMARY



**CONTECH®**  
STORMWATER SOLUTIONS.  
STANDARD DETAIL  
STORMWATER TREATMENT SYSTEM  
VORTECHS® MODEL 4000

JOB NO. 062005

**Ruggeri -  
Jensen & Associates**  
ENGINEERS • PLANNERS • SURVEYORS  
8055 CAMINO ARROYO • GILROY, CA 95020  
PHONE: (408) 848-0300 • FAX: (408) 848-0302

ESIRELLA  
ATTACHMENT 6  
STORM WATER CONTROL PLAN  
MILPITAS, CALIFORNIA



**Tree Report**  
**Milpitas Tech Center Site**  
**Milpitas CA**

**Prepared for:**  
Warmington Homes  
2010 Crow Canyon Road, Suite 450  
San Ramon CA 94583

**Prepared by:**  
HortScience, Inc.  
2150 Rheem Dr., Suite A  
Pleasanton CA 94588

March, 2007

**RECEIVED**

MAR 13 2007

CITY OF MILPITAS  
PLANNING DIVISION

**Tree Report**  
**Milpitas Tech Center Site**  
**Milpitas CA**

**Table of Contents**

	<b>Page</b>
Introduction and Overview	1
Survey Methods	1
Description of Trees	2
Suitability for Preservation	3
Evaluation of Impacts and Recommendations for Preservation	4
Tree Mitigation	11
Tree Preservation Guidelines	11

***List of Tables***

Table 1. Condition ratings and frequency of occurrence for trees	2
Table 2. Tree suitability for preservation	4
Table 3. Trees recommended for removal	5
Table 4. Mitigation calculation	11

***Attachments***

---

***Tree Survey***  
***Tree Survey Map***

### **Introduction and Overview**

Warmington Homes is planning to build a residential housing development at 1601-1759 South Main Street in Milpitas, California. The site is currently occupied by the Milpitas Tech Centre, a group of single-story commercial spaces. HortScience, Inc. was asked to prepare a **Tree Report** for the site for review by City of Milpitas.

This report provides the following information:

1. A survey of trees growing within and adjacent to the project area.
2. An assessment of the impacts of constructing the proposed project on the trees.
3. Recommended mitigation for trees recommended for removal.
4. Guidelines for tree preservation during the design, construction and maintenance phases of development.

### **Survey Methods**

Trees were surveyed on April 12 & 18, 2006. The survey included all trees 4" and greater in diameter. The survey procedure consisted of the following steps:

1. Identifying the tree as to species;
2. Measuring the trunk diameter at a point 24" above grade;
3. Tagging each tree with an identifying number and recording its location on a map;
4. Evaluating the health and structural condition using a scale of 1 – 5:
  - 5 - A healthy, vigorous tree, reasonably free of signs and symptoms of disease, with good structure and form typical of the species.
  - 4 - Tree with slight decline in vigor, small amount of twig dieback, minor structural defects that could be corrected.
  - 3 - Tree with moderate vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that might be mitigated with regular care.
  - 2 - Tree in decline, epicormic growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated.
  - 1 - Tree in severe decline, dieback of scaffold branches and/or trunk; most of foliage from epicormics; extensive structural defects that cannot be abated.
5. Rating the suitability for preservation as "good", "moderate" or "poor". Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.

**Good:** Trees with good health and structural stability that have the potential for longevity at the site.

**Moderate:** Trees with somewhat declining health and/or structural defects than can be abated with treatment. The tree will require more intense management and monitoring, and may have shorter life span than those in 'good' category.

**Poor.** Trees in poor health or with significant structural defects that cannot be mitigated. Tree is expected to continue to decline, regardless of treatment. The species or individual may have characteristics that are undesirable for landscapes, and generally are unsuited for use areas.

### **Description of Trees**

Three hundred forty-three (343) trees were evaluated. Descriptions of each tree are found in the **Tree Survey**, and locations are plotted on the **Tree Survey Map** (see attachments). A summary is provided in Table 1.

There were 10 taxa represented at the site (Table 1). The most frequently occurring species was coast redwood with 159 trees (46% of the population). Tulip tree was the next most commonly occurring species with 78 trees (23%). Shamel ash (9%), coast live oak (7%), and sweetgum (7%) were also well represented.

Tree size ranged from 4" to 40" in trunk diameter; many were in the 12"-15" diameter range.

Tree condition was predominantly good (75%) to fair (23%). Good species selection and maintenance practices, combined with the young age of the tree population, account for the overall good condition. Only five (5) trees were in poor condition. Trees in poor condition included two tulip trees that had declined in health, one redwood that was likely deprived of irrigation, and two coast live oaks that were intolerant of the level of irrigation they received.

The trees were growing in designated planting areas. Most were on the borders of the site, including along South Main Street. There were also street trees growing in sidewalk cutouts on South Main Street. Additional trees were growing in groups or individually within the development.

**Table 1: Condition ratings and frequency of occurrence of trees.**

Common Name	Scientific Name	Condition Rating			No. of Trees
		Poor (0-2)	Fair (3)	Good (4-5)	
European birch	<i>Betula pendula</i>	--	5	7	12
Evergreen ash	<i>Fraxinus uhdei</i>	--	3	29	32
Glossy privet	<i>Ligustrum lucidum</i>	--	2	--	2
Sweetgum	<i>Liquidambar styraciflua</i>	--	4	20	24
Tulip tree	<i>Liriodendron tulipifera</i>	2	25	51	78
Flowering plum	<i>Prunus cerasifera</i>	--	--	3	3
Evergreen pear	<i>Pyrus kawakamii</i>	--	2	5	7
Coast live oak	<i>Quercus agrifolia</i>	2	13	10	25
Italian buckthorn	<i>Rhamnus alaternus</i>	--	1	--	1
Coast redwood	<i>Sequoia sempervirens</i>	1	25	133	159
<b>Total</b>		<b>5</b> 1%	<b>80</b> 23%	<b>258</b> 75%	<b>343</b> 100%

### ***Suitability for Preservation***

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. For trees growing in open fields, away from areas where people and property are present, structural defects and/or poor health presents a low risk of damage or injury if they fail. However, we must be concerned about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment. Where development will not occur, the normal life cycles of decline, structural failure and death should be allowed to continue.

Evaluation of suitability for preservation considers several factors:

- **Tree health**  
Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees.
- **Structural integrity**  
Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely.
- **Species response**  
There is a wide variation in the response of individual species to construction impacts and changes in the environment. In our experience, for example, tulip tree is sensitive to root loss and injury, while coast redwood is tolerant of site disturbance.
- **Tree age and longevity**  
Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.
- **Invasiveness**  
Trees with the potential to invade native habitats, reproduce rapidly, and grow in sub-optimal environments are considered invasive. Species with these qualities may alter the functional and aesthetic qualities of the habitats they invade. None of the species surveyed at the Milpitas tech Center are considered invasive.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment (Table 2, following page).

We consider trees with good suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.



**Table 2: Tree Suitability for Preservation**

<b>Good</b>	These are trees with good health and structural stability that have the potential for longevity at the site. Two hundred fifty-eight (258) trees were of good suitability for preservation, including 133 coast redwoods, 51 tulip trees, and 29 evergreen ashes.
<b>Moderate</b>	Trees in this category have fair health and/or structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than those in the "good" category. Eighty (80) trees were of good suitability for preservation, including 25 coast redwoods, 25 tulip trees, and 13 coast live oaks.
<b>Poor</b>	Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. Five (5) trees were of poor suitability for preservation, including two (2) coast live oaks, two (2) tulip trees, and one (1) coast redwood.

### ***Evaluation of Impacts and Recommendations for Preservation***

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The **Tree Survey** was the reference point for tree condition and quality. Potential impacts from construction were evaluated using the Site Plan prepared by the Ruggeri Jensen Azar and Associates (2/27/2007). The plan depicted the layout of the roads and buildings. Accurate trunk locations were also represented.

Potential impacts from construction were estimated for each tree. The most significant impacts to the trees would occur as a result of the excavation and grading of the central portion of the site for road, building and underground garage construction.

Based on our evaluation of the plans and their impacts on the trees, we recommend preservation for 107 trees around the perimeter of the site, including 54 "Protected" trees. Preservation is predicated on establishing a **Tree Protection Zone** and other recommendations listed in the **Tree Preservation Guidelines** (page 10).

Removal is recommended for the remaining 236 trees, including 103 "Protected" trees (Table 3, following page). Removal was recommended for five (5) of the trees because of their poor suitability for preservation and three (3) small-diameter coast redwoods that had declined. Twenty-one (21) trees fell within the proposed path along the western property line. The remaining 207 trees were impacted by the proposed buildings, infrastructure and associated site improvements, including 13 street trees.

Pruning of six (6) trees (#897, 909, 935, 939, 953 and 961) may be required based on their proximity to proposed structures. Tree #956 should have the fill soil removed from around the base.

**Table 3: Trees recommended for removal**

Tree #	Species	Trunk Diameter (inches)	Protected?	Reason for Recommendation
49	Shamel ash	16	Yes	Remove; within path.
50	Coast redwood	6	No	Remove; within grading.
51	Coast redwood	5	No	Remove; declining.
654	Tulip tree	6	No	Remove; within grading.
655	Tulip tree	4	No	Remove; within grading.
656	Tulip tree	5	No	Remove; within grading.
657	Coast redwood	12	Yes	Remove; within grading.
658	Coast redwood	9	No	Remove; within grading.
659	Sweetgum	10	No	Remove; within grading.
660	Tulip tree	9	No	Remove; within grading.
661	Coast redwood	18	Yes	Remove; within grading.
662	Coast redwood	14	Yes	Remove; within grading.
663	Coast redwood	14	Yes	Remove; within grading.
664	Coast redwood	18	Yes	Remove; within grading.
665	Coast redwood	19	Yes	Remove; within grading.
666	Tulip tree	10	No	Remove; within grading.
667	Coast redwood	11	No	Remove; within grading.
668	Tulip tree	11	No	Remove; within grading.
669	Tulip tree	12	Yes	Remove; within grading.
670	Flowering plum	6	No	Remove; within grading.
671	Flowering plum	3,3,2,2	No	Remove; within grading.
672	Flowering plum	5	No	Remove; within grading.
673	Sweetgum	10	No	Remove; within grading.
674	Tulip tree	17	Yes	Remove; within grading.
675	Tulip tree	14	Yes	Remove; within grading.
676	Coast redwood	25	Yes	Remove; within grading.
677	Coast redwood	20	Yes	Remove; within grading.
678	Coast redwood	20	Yes	Remove; within grading.
679	Coast redwood	19	Yes	Remove; within grading.
680	Coast redwood	18	Yes	Remove; within grading.
681	Coast redwood	18	Yes	Remove; within grading.
682	Coast redwood	23	Yes	Remove; within grading.
683	Sweetgum	7	No	Remove; within grading.
684	Sweetgum	8,6	No	Remove; within grading.
685	Evergreen pear	8	No	Remove; within grading.
686	Evergreen pear	8	No	Remove; within grading.
687	Evergreen pear	9	No	Remove; within grading.
688	Evergreen pear	7	No	Remove; within grading.
689	Evergreen pear	7	No	Remove; within grading.
690	Evergreen pear	7	No	Remove; within grading.

(Continued, next page)

**Table 3: Trees recommended for removal, continued**

<b>Tree #</b>	<b>Species</b>	<b>Trunk Diameter (inches)</b>	<b>Protected?</b>	<b>Reason for Recommendation</b>
691	Evergreen pear	8	No	Remove; within grading.
692	Tulip tree	7	No	Remove; within grading.
693	Tulip tree	6	No	Remove; within grading.
694	Coast live oak	11	No	Remove; within grading.
695	Coast live oak	10	No	Remove; within grading.
696	Coast redwood	10	No	Remove; within grading.
697	Coast redwood	12	Yes	Remove; within grading.
698	Coast redwood	12	Yes	Remove; within grading.
699	Coast redwood	10	No	Remove; within grading.
700	Coast redwood	10	No	Remove; within grading.
701	Tulip tree	8	No	Remove; within grading.
702	Sweetgum	8	No	Remove; within grading.
703	Sweetgum	6	No	Remove; within grading.
704	Sweetgum	12	Yes	Remove; within grading.
705	Sweetgum	12	Yes	Remove; within grading.
706	Tulip tree	8	No	Remove; within grading.
707	Tulip tree	8	No	Remove; within grading.
708	Sweetgum	15	Yes	Remove; street tree.
709	Coast redwood	22	Yes	Remove; within grading.
710	Coast redwood	20	Yes	Remove; within grading.
711	Coast redwood	14	Yes	Remove; within grading.
712	Tulip tree	12	No	Remove; within grading.
713	Coast redwood	17	Yes	Remove; within grading.
714	Tulip tree	14	Yes	Remove; street tree.
715	Coast redwood	18	Yes	Remove; within grading.
716	European birch	8	No	Remove; within grading.
717	European birch	10	No	Remove; within grading.
718	Tulip tree	12	No	Remove; within grading.
719	Tulip tree	11	No	Remove; street tree.
720	Tulip tree	8	No	Remove; within grading.
721	European birch	9	No	Remove; within grading.
722	European birch	7	No	Remove; within grading.
723	European birch	7,7	No	Remove; street tree.
724	Coast redwood	18	Yes	Remove; within grading.
725	Coast redwood	18	Yes	Remove; within grading.
726	Coast redwood	18	Yes	Remove; within grading.
727	Coast redwood	18	Yes	Remove; within grading.
728	Tulip tree	14	Yes	Remove; street tree.
729	European birch	7	No	Remove; within grading.
730	Tulip tree	14	Yes	Remove; within grading.

(Continued, next page)

**Table 3: Trees recommended for removal, continued**

Tree #	Species	Trunk Diameter (inches)	Protected?	Reason for Recommendation
731	Tulip tree	12	No	Remove; within grading.
732	Tulip tree	7	No	Remove; within grading.
733	Tulip tree	6	No	Remove; within grading.
734	Tulip tree	7	No	Remove; within grading.
735	Tulip tree	7	No	Remove; within grading.
736	Tulip tree	6	No	Remove; within grading.
737	Tulip tree	9	No	Remove; within grading.
738	Tulip tree	8	No	Remove; within grading.
739	Tulip tree	9	No	Remove; poor suitability.
740	Tulip tree	12	Yes	Remove; within grading.
741	European birch	10	No	Remove; within grading.
742	European birch	8	No	Remove; within grading.
743	Tulip tree	12	Yes	Remove; within grading.
744	Tulip tree	8	No	Remove; within grading.
745	Tulip tree	11	No	Remove; within grading.
746	Tulip tree	8	No	Remove; within grading.
747	Sweetgum	8	No	Remove; within grading.
748	Sweetgum	9	No	Remove; within grading.
749	Sweetgum	11	No	Remove; within grading.
750	Sweetgum	14	Yes	Remove; within grading.
751	Tulip tree	15	Yes	Remove; within grading.
752	Tulip tree	21	Yes	Remove; within grading.
753	Tulip tree	10	No	Remove; street tree.
754	Tulip tree	9	No	Remove; within grading.
755	Tulip tree	14	Yes	Remove; within grading.
756	Tulip tree	14	Yes	Remove; within grading.
757	Tulip tree	16	Yes	Remove; street tree.
758	Coast redwood	20	Yes	Remove; within grading.
759	Coast redwood	18	Yes	Remove; within grading.
760	Tulip tree	17	Yes	Remove; street tree.
761	Coast redwood	19	Yes	Remove; within grading.
762	Coast redwood	18	Yes	Remove; within grading.
763	Coast redwood	20	Yes	Remove; within grading.
764	Coast redwood	20	Yes	Remove; within grading.
765	European birch	8	No	Remove; within grading.
766	Tulip tree	10	No	Remove; street tree.
767	European birch	8	No	Remove; within grading.
768	Tulip tree	13	Yes	Remove; within grading.
769	Tulip tree	15	Yes	Remove; within grading.
770	Tulip tree	16	Yes	Remove; street tree.

(Continued, next page)

**Table 3: Trees recommended for removal, continued**

<b>Tree #</b>	<b>Species</b>	<b>Trunk Diameter (inches)</b>	<b>Protected?</b>	<b>Reason for Recommendation</b>
771	Tulip tree	15	Yes	Remove; within grading.
772	European birch	9	No	Remove; within grading.
773	Coast redwood	23	Yes	Remove; within grading.
774	Coast redwood	24	Yes	Remove; within grading.
775	Tulip tree	18	Yes	Remove; street tree.
776	Coast redwood	22	Yes	Remove; within grading.
777	Coast redwood	25	Yes	Remove; within grading.
778	Tulip tree	10	No	Remove; street tree.
779	Tulip tree	14	Yes	Remove; within grading.
780	Tulip tree	13	Yes	Remove; within grading.
781	Sweetgum	9,8,8	No	Remove; within grading.
782	Tulip tree	12	Yes	Remove; street tree.
783	Sweetgum	10	No	Remove; within grading.
784	Sweetgum	10	No	Remove; within grading.
785	Tulip tree	13	Yes	Remove; within grading.
786	Coast redwood	22	Yes	Remove; within grading.
787	European birch	11	No	Remove; within grading.
788	Tulip tree	8	No	Remove; within grading.
789	Tulip tree	10	No	Remove; within grading.
790	Coast redwood	17	Yes	Remove; within grading.
791	Tulip tree	8	No	Remove; within grading.
792	Sweetgum	7	No	Remove; within grading.
793	Sweetgum	8	No	Remove; within grading.
794	Tulip tree	12	Yes	Remove; within grading.
795	Sweetgum	7	No	Remove; within grading.
796	Sweetgum	7	No	Remove; within grading.
797	Sweetgum	10	No	Remove; within grading.
798	Sweetgum	9	No	Remove; within grading.
799	Tulip tree	7	No	Remove; within grading.
800	Tulip tree	7	No	Remove; within grading.
801	Tulip tree	8	No	Remove; within grading.
802	Tulip tree	7	No	Remove; within grading.
803	Tulip tree	7	No	Remove; within grading.
804	Tulip tree	12	Yes	Remove; within grading.
807	Coast redwood	16	Yes	Remove; within grading.
810	Coast redwood	13	Yes	Remove; within grading.
811	Coast redwood	16	Yes	Remove; within grading.
812	Coast redwood	14	Yes	Remove; within grading.
813	Tulip tree	11	No	Remove; within grading.
814	Tulip tree	12	Yes	Remove; within grading.

(Continued, next page)

**Table 3: Trees recommended for removal, continued**

<b>Tree #</b>	<b>Species</b>	<b>Trunk Diameter (inches)</b>	<b>Protected?</b>	<b>Reason for Recommendation</b>
815	Tulip tree	11	No	Remove; within grading.
816	Coast redwood	14	Yes	Remove; within grading.
817	Coast redwood	14	Yes	Remove; within grading.
818	Coast redwood	16	Yes	Remove; within grading.
819	Coast redwood	19	Yes	Remove; within grading.
820	Tulip tree	17	Yes	Remove; within grading.
821	Tulip tree	16	Yes	Remove; within grading.
822	Tulip tree	10	No	Remove; within grading.
823	Tulip tree	12	Yes	Remove; within grading.
824	Tulip tree	10	No	Remove; within grading.
825	Coast live oak	14	Yes	Remove; within grading.
826	Coast live oak	7	No	Remove; within grading.
827	Coast redwood	9	No	Remove; within grading.
828	Coast redwood	10	Yes	Remove; within grading.
829	Coast redwood	9	No	Remove; within grading.
830	Coast redwood	11	Yes	Remove; within grading.
831	Coast redwood	14	Yes	Remove; within grading.
832	Coast redwood	12	Yes	Remove; within grading.
833	Coast redwood	14	Yes	Remove; within grading.
856	Shamel ash	16	Yes	Remove; within grading.
888	Coast redwood	13	Yes	Remove; within path.
889	Coast redwood	9	No	Remove; within path.
890	Coast redwood	12	Yes	Remove; within grading.
891	Italian buckthorn	7	No	Remove; within path.
892	Coast redwood	7	No	Remove; within path.
893	Coast redwood	10	No	Remove; within grading.
894	Coast redwood	8	No	Remove; within grading.
895	Shamel ash	16	Yes	Remove; within path.
898	Coast redwood	6	No	Remove; poor suitability.
899	Shamel ash	16	Yes	Remove; within grading.
901	Shamel ash	14	Yes	Remove; impacted by rec building.
902	Coast redwood	8	No	Remove; within path.
903	Shamel ash	16	Yes	Remove; impacted by rec building.
904	Coast redwood	5	No	Remove; impacted by rec building.
905	Shamel ash	14	Yes	Remove; impacted by rec building.
906	Coast redwood	6	No	Remove; within path.
907	Shamel ash	17	Yes	Remove; impacted by rec building.
908	Coast live oak	10	No	Remove; impacted by rec building.
910	Coast redwood	6	No	Remove; within path.
911	Coast redwood	5	No	Remove; within path.

(Continued, next page)

**Table 3: Trees recommended for removal, continued**

Tree #	Species	Trunk Diameter (inches)	Protected?	Reason for Recommendation
914	Coast redwood	8	No	Remove; within path.
915	Coast live oak	5,4,4,4	No	Remove; within new entry.
919	Shamel ash	15	Yes	Remove, within building envelope.
920	Shamel ash	16	Yes	Remove; within grading.
921	Coast live oak	14	No	Remove; within grading.
922	Shamel ash	16	Yes	Remove; within grading.
923	Coast redwood	9	No	Remove; within grading.
924	Coast redwood	12	Yes	Remove; within grading.
926	Shamel ash	21	Yes	Remove; within grading.
927	Shamel ash	14	Yes	Remove; within grading.
928	Coast redwood	7	No	Remove; within path.
930	Shamel ash	18	Yes	Remove, within building envelope.
938	Coast redwood	5	No	Remove; within path.
940	Shamel ash	10	No	Remove; within path.
941	Shamel ash	14	Yes	Remove; within grading.
942	Coast redwood	4	No	Remove; declining.
943	Coast redwood	5	No	Remove; declining.
948	Coast redwood	8	No	Remove; within grading.
949	Coast live oak	8	No	Remove; poor suitability.
959	Coast redwood	9	No	Remove; within grading.
964	Coast live oak	7	No	Remove; poor suitability.
965	Coast live oak	11	No	Remove; within grading.
968	Coast live oak	14	Yes	Remove; within grading.
973	Coast redwood	10	No	Remove; within path.
974	Coast redwood	12	Yes	Remove; within path.
975	Coast live oak	9	No	Remove; within grading.
976	Coast redwood	15	No	Remove; within path.
977	Coast live oak	7	No	Remove; within grading.
981	Coast redwood	8	No	Remove; within path.
982	Coast redwood	7	No	Remove; within path.
985	Coast redwood	5	No	Remove; within path.
986	Coast redwood	7	No	Remove; within path.
993	Tulip tree	7	No	Remove; within grading.
994	Tulip tree	6	No	Remove; within grading.
995	Tulip tree	5	No	Remove; poor suitability.
996	Tulip tree	10	No	Remove; within grading.

### Tree Mitigation

The City of Milpitas does not have specific mitigation guidelines for the approved removal of trees on private property. I was asked to formulate an approach for mitigating the approved removal of trees listed in Table 3.

The emphasis of the mitigation was placed on recapturing existing canopy cover. To accomplish this without the benefit of dripline measurements, I sorted the trees by condition and diameter. As is often the case with large-scale developments, the site is over-planted, producing trees with thin foliage, small crowns or suppressed forms. Trees with these characteristics were of fair or poor condition and are not considered as having added significantly to the canopy cover. These trees were not considered as part of the mitigation calculation. Seventy-one (71) trees were of fair or poor condition.

The remaining 165 trees recommended for removal were sorted by diameter. Trees with diameters between 4" and 12" are recommended for mitigation at a rate of 1:1, trees with diameters between 12" and 18" are recommended for mitigation at a rate of 2:1, and trees with a diameter over 18" are recommended for mitigation at a rate of 3:1. In summary, a total of 252 trees are recommended as mitigation for the approved removal of trees listed in Table 3. Table 4 provides a summary of the mitigation calculation.

**Table 4: Mitigation calculation**

Diameter class	Number of trees	Replacement ratio	Number of replacement trees
4" to 12"	78	1:1	78
12" to 18"	55	2:1	110
≥18"	32	3:1	64
<b>Total</b>			<b>252</b>

### Tree Preservation Guidelines

The goal of tree preservation is not merely tree survival during development but maintenance of tree health and beauty for many years. Trees retained on sites that are either subject to extensive injury during construction or are inadequately maintained become a liability rather than an asset. The response of individual trees will depend on the amount of excavation and grading, the care with which demolition is undertaken, and the construction methods. Coordinating any construction activity inside the **Tree Protection Zone** can minimize these impacts.

The following recommendations will help reduce impacts to trees from development and maintain and improve their health and vitality through the clearing, grading and construction phases.

#### Design recommendations

1. Any changes to the plans affecting the trees should be reviewed by the Consulting Arborist with regard to tree impacts. These include, but are not limited to, demolition plans, site plans, improvement plans, utility and drainage plans, grading plans, and landscape and irrigation plans.
2. A **TREE PROTECTION ZONE** shall be established around each tree. The **TPZ** shall be defined at the edge of the dripline, except for the area where the meandering path is proposed. No grading, excavation, construction or storage of materials shall occur within that zone. When trunks are accurately located and development plans refined, the Consulting Arborist will identify specific **TREE PROTECTION ZONES** for each tree.



3. As trees withdraw water from the soil, expansive soils may shrink within the root area. Therefore, foundations, footings and pavements on expansive soils near trees should be designed to withstand differential displacement.
4. The meandering pathway has been designed to minimize grading, by using decomposed granite placed on native grade. This design allows for encroachment into the TPZ. All TPZ encroachments must be reviewed and approved by the Consulting Arborist.
5. No underground services including utilities, sub-drains, water or sewer shall be placed in the **TREE PROTECTION ZONE**.
6. Irrigation systems must be designed so that no trenching will occur within the **TREE PROTECTION ZONE**.
7. **Tree Preservation Notes**, prepared by the Consulting Arborist, should be included on all plans.
8. Any herbicides placed under paving materials must be safe for use around trees and labeled for that use.

***Pre-construction treatments and recommendations***

1. The construction superintendent shall meet with the Consulting Arborist before beginning work to discuss work procedures and tree protection.
2. Fence all trees to be retained for completely enclose the **TREE PROTECTION ZONE** prior to demolition, grubbing or grading. Fences shall be 6 ft. chain link or equivalent as approved by consulting arborist. Fences are to remain until all grading and construction is completed.
3. Pruning of trees to provide clearance to construction vehicles, equipment and structures may be required. Six (6) trees have been preliminarily identified for pruning, including trees (#897, 909, 935, 939, 953 and 961). All pruning shall be completed by a Certified Arborist or Tree Worker and adhere to the *Tree Pruning Guidelines* of the International Society of Arboriculture. Brush shall be chipped and spread beneath the trees within the **TREE PROTECTION ZONE**.

***Recommendations for tree protection during construction***

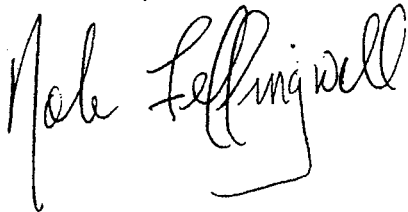
1. No grading, construction, demolition or other work shall occur within the **TREE PROTECTION ZONE**. Any modifications must be approved and monitored by the Consulting Arborist.
2. Any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, the Consulting Arborist.
3. Supplemental irrigation shall be applied as determined by the Consulting Arborist.
4. If injury should occur to any tree during construction, it should be evaluated as soon as possible by the Consulting Arborist so that appropriate treatments can be applied.
5. No excess soil, chemicals, debris, equipment or other materials shall be dumped or stored within the **TREE PROTECTION ZONE**.

6. Any additional tree pruning needed for clearance during construction must be performed by a Certified Arborist and not by construction personnel.

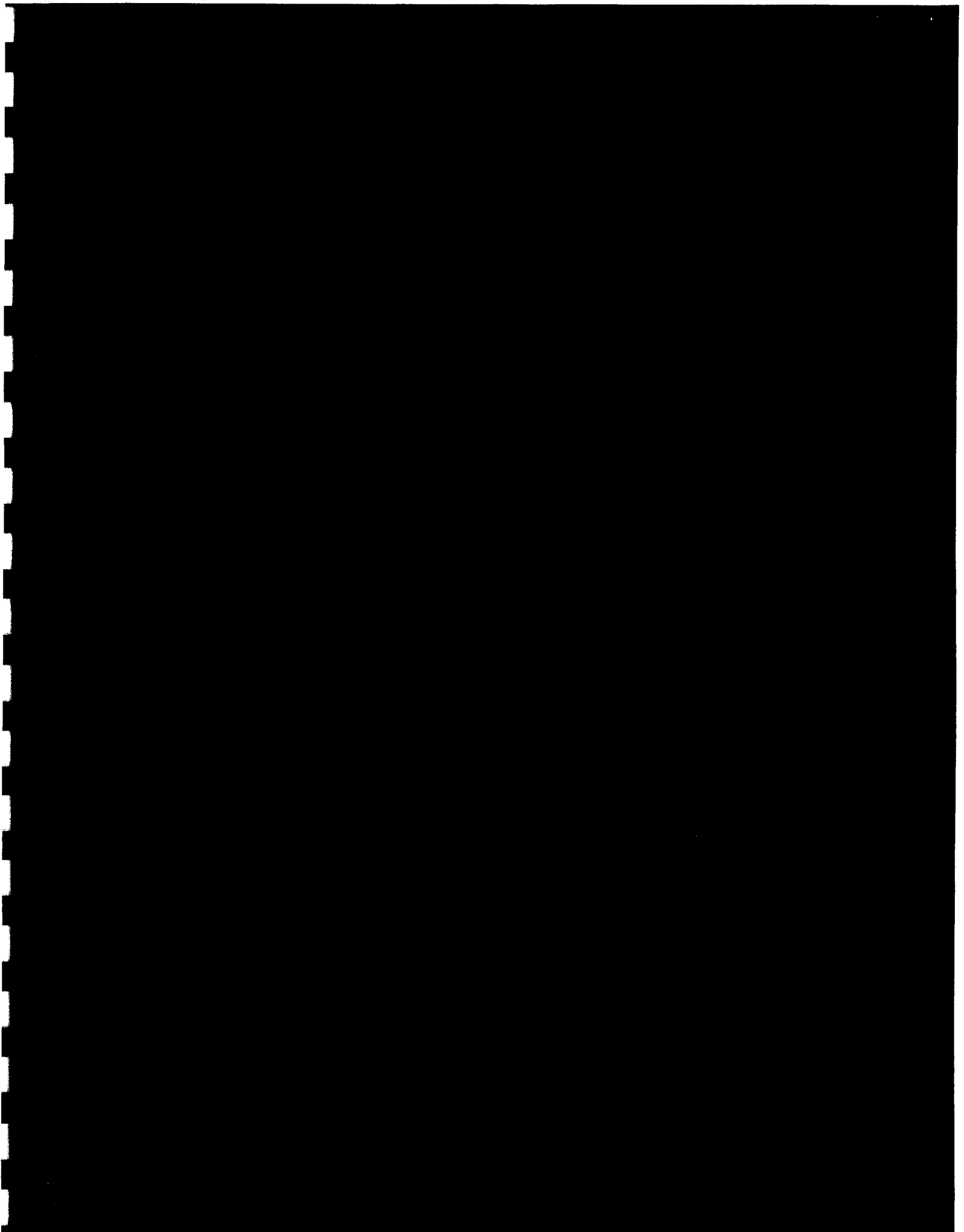
***Maintenance of Impacted Trees***

Preserved trees will experience a physical environment different from that pre-development. As a result, tree health and structural stability should be monitored. Occasional pruning, fertilization, mulch, pest management, replanting and irrigation may be required. In addition, provisions for monitoring both tree health and structural stability following construction must be made a priority. As trees age, the likelihood of failure of branches or entire trees increases. Therefore, annual inspection for hazard potential is recommended.

HortScience, Inc.

A handwritten signature in black ink, reading "John Leffingwell". The signature is written in a cursive style with a large, looped "J" and "L".

John Leffingwell  
Certified Arborist WE-3966A  
Registered Consulting Arborist #442



# HORTSUNCE TREE SURVEY

Warmington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
49 Shamel ash	16	4	Yes	Remove	Multi-stemmed at 8'.
50 Coast redwood	6	3	No	Remove	Crown shaded by adjacent trees.
51 Coast redwood	5	3	No	Preserve	Crown shaded by adjacent trees.
654 Tulip tree	6	4	No	Remove	Good form and health.
655 Tulip tree	4	4	No	Remove	Good form and health.
656 Tulip tree	5	3	No	Remove	Multi-stemmed at 8'.
657 Coast redwood	12	4	Yes	Remove	Good form and health.
658 Coast redwood	9	4	No	Remove	Good form and health.
659 Sweetgum	10	4	No	Remove	Good form and health.
660 Tulip tree	9	3	No	Remove	Leaning trunk.
661 Coast redwood	18	4	Yes	Remove	Good form and health.
662 Coast redwood	14	4	Yes	Remove	Good form and health.
663 Coast redwood	14	4	Yes	Remove	Good form and health.
664 Coast redwood	18	4	Yes	Remove	Good form and health.
665 Coast redwood	19	4	Yes	Remove	Good form and health.
666 Tulip tree	10	4	No	Remove	Good form and health.
667 Coast redwood	11	4	No	Remove	Good form and health.
668 Tulip tree	11	4	No	Remove	Good form and health.
669 Tulip tree	12	4	Yes	Remove	Good form and health.
670 Flowering plum	6	4	No	Remove	Multi-stemmed at 3'.
671 Flowering plum	3,3,2,2	4	No	Remove	Multi-stemmed at 3'.
672 Flowering plum	5	4	No	Remove	Multi-stemmed at 3'.
673 Sweetgum	10	4	No	Remove	Good form and health.
674 Tulip tree	17	3	Yes	Remove	Multi-stemmed at 18'.
675 Tulip tree	14	3	Yes	Remove	Multi-stemmed at 18'.

# HORTSCIENCE TREE SURVEY

Warmington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
676	25	5	Yes	Remove	Excellent form and health.
677	20	4	Yes	Remove	Good form and health.
678	20	4	Yes	Remove	Good form and health.
679	19	4	Yes	Remove	Good form and health.
680	18	4	Yes	Remove	Good form and health.
681	18	4	Yes	Remove	Good form and health.
682	23	4	Yes	Remove	Good form and health.
683	7	3	No	Remove	Pruned to reduce crown.
684	8,6	3	No	Remove	Pruned to reduce crown.
685	8	4	No	Remove	Multi-stemmed at 10', umbrella-shaped crown.
686	8	4	No	Remove	Multi-stemmed at 10', umbrella-shaped crown.
687	9	3	No	Remove	Crown leans west.
688	7	3	No	Remove	Cavity at base.
689	7	4	No	Remove	Multi-stemmed at 10', umbrella-shaped crown.
690	7	4	No	Remove	Multi-stemmed at 10', umbrella-shaped crown.
691	8	4	No	Remove	Multi-stemmed at 10', umbrella-shaped crown.
692	7	4	No	Remove	Good form and health.
693	6	3	No	Remove	Multi-stemmed at 10'.
694	11	3	No	Remove	Heavy flower crop.
695	10	3	No	Remove	Poor color foliage.
696	10	3	No	Remove	Thin foliage.
697	12	3	Yes	Remove	Thin foliage.
698	12	3	Yes	Remove	Thin foliage.
699	10	3	No	Remove	Stunted foliage.
700	10	3	No	Remove	Stunted foliage.

# HORTISOURCE TREE SURVEY

Warmington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
701 Tulip tree	8	4	No	Preserve	Good form and health.
702 Sweetgum	8	4	No	Preserve	Multi-stemmed at 7'.
703 Sweetgum	6	4	No	Preserve	Multi-stemmed at 5'.
704 Sweetgum	12	4	Yes	Remove	Trunk divides at 12' with narrow attachment.
705 Sweetgum	12	4	Yes	Remove	Spreading form.
706 Tulip tree	8	4	No	Remove	Trunk divides at 8'.
707 Tulip tree	8	4	No	Preserve	Good form and health.
708 Sweetgum	15	4	Yes	Remove	Trunk divides at 10'.
709 Coast redwood	22	4	Yes	Remove	Good form and health.
710 Coast redwood	20	4	Yes	Remove	Good form and health.
711 Coast redwood	14	4	Yes	Remove	Good form and health.
712 Tulip tree	12	4	No	Remove	Trunk divides at 12'.
713 Coast redwood	17	4	Yes	Remove	Good form and health.
714 Tulip tree	14	4	Yes	Remove	Multi-stemmed at 10'.
715 Coast redwood	18	4	Yes	Remove	Good form and health.
716 European birch	8	4	No	Remove	Trunk divides at 4'.
717 European birch	10	4	No	Remove	Multi-stemmed at 14'.
718 Tulip tree	12	4	No	Remove	Multi-stemmed at 10'.
719 Tulip tree	11	4	No	Remove	Bark damaged on low branch.
720 Tulip tree	8	3	No	Remove	Lower branches were removed
721 European birch	9	4	No	Remove	Good form and health.
722 European birch	7	3	No	Remove	Declining health.
723 European birch	7,7	3	No	Remove	Trunk divides at 3'.
724 Coast redwood	18	4	Yes	Remove	Good form and health.
725 Coast redwood	18	4	Yes	Remove	Good form and health.

# HORTSCIENCE TREE SURVEY

Wilmington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
726 Coast redwood	18	4	Yes	Remove	Good form and health.
727 Coast redwood	18	4	Yes	Remove	Good form and health.
728 Tulip tree	14	4	Yes	Remove	Good form and health.
729 European birch	7	3	No	Remove	Poor form
730 Tulip tree	14	4	Yes	Remove	Good form and health.
731 Tulip tree	12	4	No	Remove	Good form and health.
732 Tulip tree	7	4	No	Remove	Good form and health.
733 Tulip tree	6	4	No	Remove	Good form and health.
734 Tulip tree	7	3	No	Remove	Good form and health.
735 Tulip tree	7	4	No	Remove	Was topped.
736 Tulip tree	6	4	No	Remove	Good form and health.
737 Tulip tree	9	4	No	Remove	Good form and health.
738 Tulip tree	8	4	No	Remove	Good form and health.
739 Tulip tree	9	2	No	Remove	Good form and health.
740 Tulip tree	12	4	Yes	Remove	Extensive branch dieback.
741 European birch	10	4	No	Remove	Good form and health.
742 European birch	8	3	No	Remove	Multi-stemmed at 6'.
743 Tulip tree	12	3	Yes	Remove	Replaced leader.
744 Tulip tree	8	4	No	Remove	Multi-stemmed at 7'.
745 Tulip tree	11	4	No	Remove	Good form and health.
746 Tulip tree	8	4	No	Remove	Good form and health.
747 Sweetgum	8	4	No	Remove	Good form and health.
748 Sweetgum	9	4	No	Remove	Good form and health.
749 Sweetgum	11	4	No	Remove	Good form and health.
750 Sweetgum	14	3	Yes	Remove	Good form and health. Poor form.

# HORTSCIENCE TREE SURVEY

Warmington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
751 Tulip tree	15	3	Yes	Remove	Trunk divides at 5'.
752 Tulip tree	21	4	Yes	Remove	Multi-stemmed at 10'.
753 Tulip tree	10	3	No	Remove	Branches black from honeydew.
754 Tulip tree	9	3	No	Remove	Branches black from honeydew.
755 Tulip tree	14	3	Yes	Remove	Trunk divides at 12'.
756 Tulip tree	14	4	Yes	Remove	Good form and health.
757 Tulip tree	16	3	Yes	Remove	Branches black from honeydew.
758 Coast redwood	20	4	Yes	Remove	Good form and health.
759 Coast redwood	18	4	Yes	Remove	Good form and health.
760 Tulip tree	17	4	Yes	Remove	Good form and health.
761 Coast redwood	19	4	Yes	Remove	Good form and health.
762 Coast redwood	18	4	Yes	Remove	Good form and health.
763 Coast redwood	20	4	Yes	Remove	Good form and health.
764 Coast redwood	20	4	Yes	Remove	Good form and health.
765 European birch	8	4	No	Remove	Good form and health.
766 Tulip tree	10	3	No	Remove	Good form and health.
767 European birch	8	3	No	Remove	Branches black from honeydew.
768 Tulip tree	13	4	Yes	Remove	Trunk divides at 6'.
769 Tulip tree	15	4	Yes	Remove	Good form and health.
770 Tulip tree	16	3	Yes	Remove	Good form and health.
771 Tulip tree	15	4	Yes	Remove	Trunk divides at 12'.
772 European birch	9	4	No	Remove	Good form and health.
773 Coast redwood	23	4	Yes	Remove	Good form and health.
774 Coast redwood	24	4	Yes	Remove	Good form and health.
775 Tulip tree	18	3	Yes	Remove	Multi-stemmed at 18'.



# HORTSCIENCE TREE SURVEY

Warmington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
776 Coast redwood	22	4	Yes	Remove	Good form and health.
777 Coast redwood	25	4	Yes	Remove	Good form and health.
778 Tulip tree	10	3	No	Remove	Crook in trunk.
779 Tulip tree	14	4	Yes	Remove	Good form and health.
780 Tulip tree	13	4	Yes	Remove	Good form and health.
781 Sweetgum	9,8,8	4	No	Remove	Multi-stemmed at 4'.
782 Tulip tree	12	3	Yes	Remove	Crook in trunk.
783 Sweetgum	10	4	No	Remove	Good form and health.
784 Sweetgum	10	4	No	Remove	Good form and health.
785 Tulip tree	13	4	Yes	Remove	Good form and health.
786 Coast redwood	22	4	Yes	Remove	Good form and health.
787 European birch	11	4	No	Remove	Good form and health.
788 Tulip tree	8	3	No	Remove	Trunk divides at 12'.
789 Tulip tree	10	4	No	Remove	Good form and health.
790 Coast redwood	17	4	Yes	Remove	Good form and health.
791 Tulip tree	8	4	No	Remove	Good form and health.
792 Sweetgum	7	4	No	Remove	Good form and health.
793 Sweetgum	8	4	No	Remove	Good form and health.
794 Tulip tree	12	4	Yes	Remove	Good form and health.
795 Sweetgum	7	4	No	Remove	Good form and health.
796 Sweetgum	7	4	No	Remove	Good form and health.
797 Sweetgum	10	3	No	Remove	Large, low branches.
798 Sweetgum	9	4	No	Remove	Good form and health.
799 Tulip tree	7	4	No	Remove	Good form and health.
800 Tulip tree	7	4	No	Remove	Good form and health.

# HORTSCIENCE TREE SURVEY

Warmington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
801 Tulip tree	8	4	No	Remove	Good form and health.
802 Tulip tree	7	4	No	Remove	Good form and health.
803 Tulip tree	7	4	No	Remove	Good form and health.
804 Tulip tree	12	3	Yes	Remove	Multi-stemmed at 6'.
805 Coast redwood	17	4	Yes	Preserve	Good form and health.
806 Coast redwood	14	4	Yes	Preserve	Good form and health.
807 Coast redwood	16	4	Yes	Remove	Good form and health.
808 Tulip tree	8	4	No	Remove	Good form and health.
809 Tulip tree	8	4	No	Preserve	Good form and health.
810 Coast redwood	13	4	Yes	Remove	Good form and health.
811 Coast redwood	16	4	Yes	Preserve	Good form and health.
812 Coast redwood	14	4	Yes	Remove	Good form and health.
813 Tulip tree	11	3	No	Remove	Good form and health. Branch dieback.
814 Tulip tree	12	4	Yes	Remove	Good form and health.
815 Tulip tree	11	3	No	Remove	Branches black from honeydew.
816 Coast redwood	14	4	Yes	Remove	Good form and health.
817 Coast redwood	14	4	Yes	Remove	Good form and health.
818 Coast redwood	16	4	Yes	Remove	Good form and health.
819 Coast redwood	19	4	Yes	Remove	Good form and health.
820 Tulip tree	17	3	Yes	Remove	Trunk divides at 6'.
821 Tulip tree	16	4	Yes	Remove	Good form and health.
822 Tulip tree	10	3	No	Remove	Lower branches were removed.
823 Tulip tree	12	3	Yes	Remove	Branch dieback.
824 Tulip tree	10	4	No	Remove	Good form and health.
825 Coast live oak	14	4	Yes	Remove	Good form, poor color.

# HORTSCIENCE TREE SURVEY

Warmington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
826 Coast live oak	7	3	No	Remove	Trunk divides at 7'.
827 Coast redwood	9	4	No	Remove	Good form and health.
828 Coast redwood	10	4	Yes	Remove	Good form and health.
829 Coast redwood	9	4	No	Remove	Good form and health.
830 Coast redwood	11	4	Yes	Remove	Good form and health.
831 Coast redwood	14	4	Yes	Remove	Good form and health.
832 Coast redwood	12	4	Yes	Remove	Good form and health.
833 Coast redwood	14	4	Yes	Remove	Good form and health.
834 Coast redwood	9	4	No	Preserve	Good form and health.
835 Coast redwood	4	3	No	Preserve	Asymmetric crown.
836 Glossy privet	15,13,7	3	Yes	Preserve	Multi-stemmed at base.
837 Coast redwood	16	4	Yes	Preserve	Good form and health.
838 Coast redwood	6	3	No	Preserve	Asymmetric crown.
839 Coast redwood	17	4	Yes	Preserve	Good form and health.
840 Coast redwood	11	4	Yes	Preserve	Good form and health.
841 Coast live oak	14	4	Yes	Preserve	Crown leans.
842 Sweetgum	12,7	4	Yes	Preserve	Good form and health.
843 Sweetgum	10,8,6	4	No	Preserve	Multi-stemmed at 3'.
844 Coast redwood	17	4	Yes	Preserve	Good form and health.
845 Coast redwood	12	4	Yes	Preserve	Good form and health.
846 Coast redwood	10	4	Yes	Preserve	Good form and health.
847 Coast live oak	18	4	Yes	Preserve	Asymmetric crown.
848 Coast redwood	8	4	No	Preserve	Good form and health.
849 Coast redwood	10	4	Yes	Preserve	Good form and health.
850 Coast live oak	14	3	Yes	Preserve	Multi-stemmed at 5'.

# HORTSCIENCE TREE SURVEY

Warmington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
851 Coast redwood	8	4	No	Preserve	Good form and health.
852 Coast redwood	13	4	Yes	Preserve	Good form and health.
853 Coast redwood	10	4	Yes	Preserve	Good form and health.
854 Coast redwood	8	4	No	Preserve	Good form and health.
855 Coast redwood	6	4	No	Preserve	Good form and health.
856 Shamel ash	16	4	Yes	Preserve	Multi-stemmed at 10'.
857 Shamel ash	16	4	Yes	Preserve	Trunk divides at 10'.
858 Shamel ash	18	4	Yes	Preserve	Multi-stemmed at 10'.
859 Shamel ash	13	4	Yes	Preserve	Multi-stemmed at 18'.
860 Coast redwood	11	4	No	Preserve	Good form and health.
861 Coast redwood	7	4	No	Preserve	Good form and health.
862 Coast redwood	12	4	Yes	Preserve	Good form and health.
863 Coast redwood	8	4	No	Preserve	Good form and health.
864 Coast redwood	14	4	Yes	Preserve	Good form and health.
865 Coast redwood	8	4	No	Preserve	Good form and health.
866 Coast redwood	11	4	No	Preserve	Good form and health.
867 Coast redwood	8	4	No	Preserve	Good form and health.
868 Coast live oak	15	3	Yes	Preserve	Branch tip dieback.
869 Coast redwood	8	4	No	Preserve	Good form and health.
870 Coast redwood	13	4	Yes	Preserve	Good form and health.
871 Coast redwood	8	4	No	Preserve	Good form and health.
872 Coast redwood	14	4	Yes	Preserve	Good form and health.
873 Coast redwood	8	4	No	Preserve	Good form and health.
874 Coast redwood	12	4	Yes	Preserve	Good form and health.
875 Coast redwood	13	4	Yes	Preserve	Good form and health.

# HORTSOURCE TREE SURVEY

Warmington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
876	15	4	Yes	Preserve	Leaning trunk.
877	13	3	Yes	Preserve	Multi-stemmed at 10'.
878	10	4	No	Preserve	Good form and health.
879	12	4	Yes	Preserve	Good form and health.
880	10	4	No	Preserve	Good form and health.
881	13	4	Yes	Preserve	Good form and health.
882	13	4	Yes	Preserve	Good form and health.
883	13	4	Yes	Preserve	Good form and health.
884	13	4	Yes	Preserve	Good form and health.
885	10	4	No	Preserve	Good form and health.
886	14	4	No	Preserve	Good form and health.
887	8	4	No	Preserve	Good form and health.
888	13	4	Yes	Preserve	Good form and health.
889	9	4	No	Preserve	Good form and health.
890	12	4	Yes	Preserve	Good form and health.
891	7	3	No	Preserve	Leaning trunk.
892	7	4	No	Preserve	Good form and health.
893	10	4	No	Preserve	Good form and health.
894	8	4	No	Preserve	Good form and health.
895	16	4	Yes	Preserve	Multi-stemmed at 8'.
896	14	4	Yes	Preserve	Multi-stemmed at 8'.
897	15	4	Yes	Preserve	Multi-stemmed at 8'.
898	6	2	No	Preserve	Branch dieback.
899	16	4	Yes	Preserve	Multi-stemmed at 8'.
900	6	4	No	Preserve	Good form and health.

# HORTSCAPE TREE SURVEY

Warrington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
901 Shamel ash	14	4	Yes	Preserve	Multi-stemmed at 8'.
902 Coast redwood	8	3	No	Preserve	Crown shaded by adjacent trees.
903 Shamel ash	16	4	Yes	Preserve	Multi-stemmed at 8'.
904 Coast redwood	5	3	No	Preserve	Crown shaded by adjacent trees.
905 Shamel ash	14	4	Yes	Preserve	Multi-stemmed at 8'.
906 Coast redwood	6	3	No	Preserve	Crown shaded by adjacent trees.
907 Shamel ash	17	3	Yes	Preserve	Trunk wound.
908 Coast live oak	10	3	No	Preserve	Crown leans east.
909 Coast live oak	40	5	Yes	Preserve	Three trunks emerge at 8'.
910 Coast redwood	6	3	No	Preserve	Crown shaded by adjacent trees.
911 Coast redwood	5	3	No	Preserve	Crown shaded by adjacent trees.
912 Shamel ash	14	4	Yes	Preserve	Multi-stemmed at 8'.
913 Shamel ash	16	4	Yes	Preserve	Multi-stemmed at 8'.
914 Coast redwood	8	3	No	Preserve	Crown shaded by adjacent trees.
915 Coast live oak	5,4,4,4	4	No	Preserve	Multi-stemmed a 2'.
916 Shamel ash	13	4	Yes	Preserve	Multi-stemmed at 8'.
919 Shamel ash	15	4	Yes	Preserve	Multi-stemmed at 8'.
920 Shamel ash	16	4	Yes	Remove	Multi-stemmed at 8'.
921 Coast live oak	14	3	No	Remove	Crown leans east.
922 Shamel ash	16	4	Yes	Remove	Multi-stemmed at 8'.
923 Coast redwood	9	3	No	Remove	Crown shaded by adjacent trees.
924 Coast redwood	12	4	Yes	Remove	Good form and health.
926 Shamel ash	21	4	Yes	Remove	Multi-stemmed at 8'.
927 Shamel ash	14	3	Yes	Remove	Crown leans south.
928 Coast redwood	7	3	No	Preserve	Topped to clear utility lines.

# HORTSCIENCE TREE SURVEY

Warmington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
929 Coast redwood	7	3	No	Preserve	Topped to clear utility lines.
930 Shamel ash	18	4	Yes	Preserve	Multi-stemmed at 8'.
931 Shamel ash	14	4	Yes	Preserve	Crown leans south.
932 Coast redwood	7	4	No	Preserve	Good form and health.
933 Shamel ash	12	4	Yes	Preserve	Multi-stemmed at 8'.
934 Shamel ash	13	4	Yes	Preserve	Multi-stemmed at 8'.
935 Shamel ash	13	4	Yes	Preserve	Multi-stemmed at 8'.
936 Coast redwood	5	4	No	Preserve	Good form and health.
937 Shamel ash	15	4	Yes	Preserve	Multi-stemmed at 8'.
938 Coast redwood	5	3	No	Preserve	Crown shaded by adjacent trees.
939 Shamel ash	14	4	Yes	Preserve	Multi-stemmed at 8'.
940 Shamel ash	10	4	No	Preserve	Multi-stemmed at 8'.
941 Shamel ash	14	4	Yes	Remove	Multi-stemmed at 8'.
942 Coast redwood	4	3	No	Preserve	Crown shaded by adjacent trees.
943 Coast redwood	5	3	No	Preserve	Crown shaded by adjacent trees.
944 Shamel ash	9	3	No	Preserve	Crown shaded...
945 Shamel ash	14	4	Yes	Remove	Multi-stemmed at 8'.
946 Coast redwood	5	3	No	Preserve	Crown shaded by adjacent trees.
947 Coast redwood	8	3	No	Preserve	Crown shaded by adjacent trees.
948 Coast redwood	8	3	No	Remove	Crown shaded by adjacent trees.
949 Coast live oak	8	1	No	Remove	Extensive dieback.
950 Coast redwood	4	4	No	Preserve	Good form and health.
951 Coast redwood	5	4	No	Preserve	Good form and health.
952 Coast live oak	12	3	Yes	Remove	Poor color foliage.
953 Coast live oak	9	4	No	Preserve	Good form and health.

# HORTSCIENCE TREE SURVEY

Warmington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
954 Coast redwood	6	4	No	Preserve	Good form and health.
955 Coast redwood	6	4	No	Preserve	Good form and health.
956 Coast live oak	31	4	Yes	Preserve	Trunk divides at 10'.
957 Coast redwood	7	3	No	Preserve	Crown shaded by adjacent trees.
958 Coast redwood	11	4	No	Preserve	Good form and health.
959 Coast redwood	9	4	No	Preserve	Good form and health.
960 Coast redwood	10	4	No	Preserve	Good form and health.
961 Coast live oak	15	4	Yes	Preserve	Multi-stemmed at 10'.
962 Coast redwood	11	4	No	Preserve	Good form and health.
963 Coast redwood	8	4	No	Preserve	Good form and health.
964 Coast live oak	7	2	No	Preserve	Poor color.
965 Coast live oak	11	3	No	Preserve	Swelling at base of trunk.
966 Coast redwood	7	4	No	Preserve	Good form and health.
967 Coast redwood	7	4	No	Preserve	Good form and health.
968 Coast live oak	14	3	Yes	Remove	Branch tip dieback.
969 Coast redwood	8	4	No	Preserve	Good form and health.
970 Coast redwood	8	4	No	Preserve	Good form and health.
971 Coast live oak	14	3	Yes	Preserve	Minor tip dieback.
972 Coast redwood	10	4	No	Preserve	Good form and health.
973 Coast redwood	10	4	No	Preserve	Good form and health.
974 Coast redwood	12	4	Yes	Preserve	Good form and health.
975 Coast live oak	9	3	No	Preserve	Poor color.
976 Coast redwood	15	4	No	Preserve	Good form and health.
977 Coast live oak	7	4	No	Preserve	Good form and health.
978 Coast redwood	10	4	No	Remove	Good form and health.



# HORTSCIENCE TREE SURVEY

Warmington Homes  
Milpitas Tech Center Site  
Milpitas CA  
April 2006

TREE SPECIES No.	TRUNK DIAMETER (inches)	CONDITION 1=POOR 5=EXCELLENT	PROTECTED TREE?	ACTION Remove or Preserve	COMMENTS
979 Coast redwood	14	4	No	Preserve	Good form and health.
980 Coast redwood	12	4	No	Preserve	Good form and health.
981 Coast redwood	8	4	No	Preserve	Good form and health.
982 Coast redwood	7	4	No	Preserve	Good form and health.
983 Glossy privet	10, 7, 7, 5, 5, 4	3	No	Preserve	Multi-stemmed at base.
984 Coast redwood	10	4	No	Preserve	Good form and health.
985 Coast redwood	5	4	No	Preserve	Good form and health.
986 Coast redwood	7	4	No	Preserve	Good form and health.
987 Coast redwood	5	4	No	Preserve	Good form and health.
988 Coast redwood	17	5	Yes	Preserve	Excellent form and health.
989 Coast redwood	15	4	Yes	Preserve	Good form and health.
990 Coast redwood	11	4	No	Preserve	Good form and health.
991 Coast redwood	14	4	Yes	Preserve	Good form and health.
992 Coast redwood	18	4	Yes	Preserve	Good form and health.
993 Tulip tree	7	4	No	Preserve	Multi-stemmed at 7.
994 Tulip tree	6	4	No	Preserve	Good form and health.
995 Tulip tree	5	2	No	Remove	Branch dieback.
996 Tulip tree	10	4	No	Preserve	Good form and health.